

digital

OpenVMS Master Index

OpenVMS
OpenVMS



OpenVMS Master Index

Order Number: AA-PV5VC-TK

May 1995

This Master Index includes index entries for the most commonly used manuals shipped in the full documentation set for the software versions cited below.

Revision/Update Information: This manual supersedes the master index for OpenVMS Version 6.1.

Software Versions: OpenVMS Alpha Version 6.2
OpenVMS VAX Version 6.2

**Digital Equipment Corporation
Maynard, Massachusetts**

May 1995

Digital Equipment Corporation makes no representations that the use of its products in the manner described in this publication will not infringe on existing or future patent rights, nor do the descriptions contained in this publication imply the granting of licenses to make, use, or sell equipment or software in accordance with the description.

Possession, use, or copying of the software described in this publication is authorized only pursuant to a valid written license from Digital or an authorized sublicensor.

© Digital Equipment Corporation 1995. All rights reserved.

The following are trademarks of Digital Equipment Corporation: ACMS, ALL-IN-1, BASIC, Bookreader, CDA, CDD/Repository, CI, COHESION, DATATRIEVE, DBMS, DDCMP, DDIF, DEC, DEC Ada, DECalert, DEC ACCESSWORKS, DECADMIRE, DEC BASIC, DECdecision, DECdtm, DECevent, DECforms, DEC Fortran, DEC GKS, DEClings, DECmcc, DECmigrate, DECnet, DECnet-DOS, DEC OPS5, DEC PHIGS, DECplan, DECquery, DEC RALLY, DEC Rdb, DECSA, DECScheduler, DECservers, DECset, DECstart, DECTalk, DECterm, DECthreads, DECTp, DECTrace, DEC VTX, DEC VUIT, DECwindows, DELNI, DELUA, DEQNA, DEUNA, Digital, DNA, DTIF, EDT, eXcursion, GIGAswitch, HSC, HSJ, HSZ, IAS, InfoServer, KDA, LASTport, LAT, MailWorks, MASSBUS, MicroVAX, MSCP, NAS, ObjectBroker, OpenVMS, Packnet, PATHWORKS, PIXELVISION, POLYCENTER, RA, RALLY, RB, RC, RC25, RD, ReGIS, RK, RL, RM, RMS-11, RP, RQDX3, RSTS/E, RSX, RSX-11S, RT-11, rtVAX, RX, RX01, RX02, RX33, RX50, StorageWorks, TA, ThinWire, TMSCP, TOPS-10, TOPS-20, TU, TURBOchannel, UDA, UETP, ULTRIX, UNIBUS, VAX, VAX Ada, VAX APL, VAX BASIC, VAX BLISS-32, VAX C, VAXcluster, VAX COBOL, VAX DATATRIEVE, VAX DIBOL, VAX DOCUMENT, VAX FMS, VAX FORTRAN, VAXft, VAX GKS, VAX MACRO, VAX OPS5, VAX Pascal, VAX RALLY, VAX RMS, VAX SCAN, VAXsimPLUS, VAXstation, VMS, VMScluster, VT100, VT300, and the DIGITAL logo.

The following are third-party trademarks:

AppleShare, AppleTalk, and Macintosh are registered trademarks of Apple Computer, Inc.

IBM is a registered trademark of International Business Machines Corporation.

Microsoft, MS, and MS-DOS are registered trademarks of Microsoft Corporation.

Motif is a registered trademark of Open Software Foundation, Inc.

NetWare is a registered trademark of Novell, Inc.

Motif, OSF, OSF/1, OSF/Motif, and Open Software Foundation are registered trademarks of the Open Software Foundation, Inc.

OSI is a registered trademark of CA Management, Inc.

POSIX is a registered trademark of The Institute of electrical and Electronics Engineers, Inc.

PostScript is a registered trademark of Adobe Systems, Inc.

UNIX is a registered trademark of Unix System Laboratories, Inc. a wholly-owned subsidiary of Novell, Inc.

X/Open is a trademark of X/Open Company, Limited.

X Window System is a trademark of Massachusetts Institute of Technology.

All other trademarks and registered trademarks are the property of their respective holders.

ZK4516

This document was prepared using VAX DOCUMENT Version 2.1.

Send Us Your Comments

We welcome your comments on this or any other OpenVMS manual. If you have suggestions for improving a particular section or find any errors, please indicate the title, order number, chapter, section, and page number (if available). We also welcome more general comments. Your input is valuable in improving future releases of our documentation.

You can send comments to us in the following ways:

- Internet electronic mail: openvmsdoc@zko.mts.dec.com
- Fax: 603-881-0120 Attn: OpenVMS Documentation, ZK03-4/U08
- Online form

Print or edit the online form `SY$HELP:OPENVMSDOC_COMMENTS.TXT`. Send the completed online form by electronic mail to our Internet address, or send the completed hardcopy form by fax or through the postal service.

Please send letters or the form to:

Digital Equipment Corporation
OpenVMS Documentation
110 Spit Brook Road, ZK03-4/U08
Nashua, NH 03062-2698
USA

Thank you.

How To Order Additional Documentation

Use the following table to order additional documentation or information.
If you need help deciding which documentation best meets your needs, call
800-DIGITAL (800-344-4825).

Telephone and Direct Mail Orders

Location	Call	Fax	Write
U.S.A.	DECdirect 800.DIGITAL 800.344.4825	Fax: 800.234.2298	Digital Equipment Corporation P.O. Box CS2008 Nashua, NH 03061
Puerto Rico	809.781.0505	Fax: 809.749.8300	Digital Equipment Caribbean, Inc. 3 Digital Plaza, 1st Street, Suite 200 P.O. Box 11038 Metro Office Park San Juan, Puerto Rico 00910-2138
Canada	800.267.6215	Fax: 613.592.1946	Digital Equipment of Canada, Ltd. Box 13000 100 Herzberg Road Kanata, Ontario, Canada K2K 2A6 Attn: DECdirect Sales
International	—	—	Local Digital subsidiary or approved distributor
Internal Orders	DTN: 264.3030 603.884.3030	Fax: 603.884.3960	U.S. Software Supply Business Digital Equipment Corporation 10 Cotton Road Nashua, NH 03063-1260

ZK-7654A-GE

Preface

The *OpenVMS Master Index* merges index entries from the most commonly used manuals in the full documentation set for OpenVMS Version 6.2. Manuals included in the *OpenVMS Master Index* are listed in Table 1.

Each entry in the *OpenVMS Master Index* is followed by an abbreviated manual title and a reference to the page where the topic appears in that manual. The manual abbreviation is preceded by a letter designator in parentheses to indicate the primary audience for that manual. Table 1 in this section maps the abbreviated titles to the full manual names.

The following example shows how an entry in this index might refer to several manuals for one topic:

XAB\$L_ALQ field, (P) *RMS Ref*, 7–3; (P) *File Appl*, 4–34
using to specify additional file space, (P) *RMS Ref*, RMS–37

This entry indicates that you can find information about the XAB\$L_ALQ field in the following places:

- Page 7–3 in the *OpenVMS Record Management Services Reference Manual*.
- Page 4–34 in the *Guide to OpenVMS File Applications*.
- Page RMS–37 in the *OpenVMS Record Management Services Reference Manual*. The index subentry indicates that this page describes how to use the XAB\$L_ALQ field to specify additional file space.

The (P) prefix preceding the title abbreviations in the sample index entry indicates that the manuals are likely of most interest to programmers.

System services, RMS services, and run-time library routines are indexed by facility prefix. For example, the Assign system service is indexed under SYS\$ASSIGN. Run-time library routines are indexed under their corresponding facility prefixes:

General purpose (OTS\$)
Library (LIB\$)
Mathematics (MTH\$)
Screen management (SMG\$)
String manipulation (STR\$)

Table 1 Title Abbreviations Mapped to Manual Names

Title Abbreviation in Index Entries	Audience ¹	Manual Title
<i>Alpha Perform</i>	S	<i>Guide to OpenVMS AXP Performance Management</i>
<i>Alpha SDA</i>	P	<i>OpenVMS AXP System Dump Analyzer Utility Manual</i>
<i>Calling Std</i>	P	<i>OpenVMS Calling Standard</i>
<i>Comparison</i>	S	<i>A Comparison of System Management on OpenVMS AXP and OpenVMS VAX</i>
<i>Compatibility</i>	G	<i>OpenVMS Compatibility Between VAX and Alpha</i>
<i>Concepts</i>	P	<i>OpenVMS Programming Concepts Manual</i>
<i>DCL A-M</i>	G	<i>OpenVMS DCL Dictionary: A-M</i>
<i>DCL N-Z</i>	G	<i>OpenVMS DCL Dictionary: N-Z</i>
<i>Debugger</i>	P	<i>OpenVMS Debugger Manual</i>
<i>DECamds</i>	S	<i>DECamds User's Guide</i>
<i>DECnet Intro</i>	S	<i>DECnet for OpenVMS Guide to Networking</i>
<i>DECnet Mgmt</i>	S	<i>DECnet for OpenVMS Networking Manual</i>
<i>DECnet Mgmt Util</i>	S	<i>DECnet for OpenVMS Network Management Utilities</i>
<i>DECthreads</i>	P	<i>Guide to DECthreads</i>
<i>Dependable</i>	S	<i>Building Dependable Systems: The OpenVMS Approach</i>
<i>Environment</i>	P	<i>OpenVMS Programming Environment Manual</i>
<i>File Appl</i>	P	<i>Guide to OpenVMS File Applications</i>
<i>Help Msg</i>	G	<i>OpenVMS System Messages: Companion Guide for Help Message Users</i>
<i>I/O User</i>	P	<i>OpenVMS I/O User's Reference Manual</i>
<i>Interfaces</i>	P	<i>OpenVMS Programming Interfaces: Calling a System Routine</i>
<i>LIB\$</i>	P	<i>OpenVMS RTL Library (LIB\$) Manual</i>
<i>Linker</i>	P	<i>OpenVMS Linker Utility Manual</i>
<i>Modular Proc</i>	P	<i>Guide to Creating OpenVMS Modular Procedures</i>
<i>MTH\$</i>	P	<i>OpenVMS VAX RTL Mathematics (MTH\$) Manual</i>
<i>OTS\$</i>	P	<i>OpenVMS RTL General Purpose (OTS\$) Manual</i>
<i>Portable Math</i>	P	<i>Digital Portable Mathematics Library</i>
<i>Rec Mgmt Util</i>	P	<i>OpenVMS Record Management Utilities Reference Manual</i>
<i>RMS Ref</i>	P	<i>OpenVMS Record Management Services Reference Manual</i>
<i>Security</i>	S	<i>OpenVMS Guide to System Security</i>
<i>SMG\$</i>	P	<i>OpenVMS RTL Screen Management (SMG\$) Manual</i>
<i>STR\$</i>	P	<i>OpenVMS RTL String Manipulation (STR\$) Manual</i>
<i>SW Overview</i>	G	<i>OpenVMS Software Overview</i>
<i>Sys Mgmt Util A-L</i>	S	<i>OpenVMS System Management Utilities Reference Manual: A-L</i>
<i>Sys Mgmt Util M-Z</i>	S	<i>OpenVMS System Management Utilities Reference Manual: M-Z</i>

¹ G = General User, S = System Manager, P = Programmer

(continued on next page)

Table 1 (Cont.) Title Abbreviations Mapped to Manual Names

Title Abbreviation in Index Entries	Audience ¹	Manual Title
<i>Sys Mgr Essentials</i>	S	<i>OpenVMS System Manager's Manual: Essentials</i>
<i>Sys Mgr Tuning</i>	S	<i>OpenVMS System Manager's Manual: Tuning, Monitoring, and Complex Systems</i>
<i>Sys Svc I</i>	P	<i>OpenVMS System Services Reference Manual: A-GETMSG</i>
<i>Sys Svc II</i>	P	<i>OpenVMS System Services Reference Manual: GETQUI-Z</i>
<i>TCP/IP</i>	S	<i>TCP/IP Networking on OpenVMS Systems</i>
<i>User</i>	G	<i>OpenVMS User's Manual</i>
<i>Util Routines</i>	P	<i>OpenVMS Utility Routines Manual</i>
<i>V6.2 New Feat</i>	G	<i>OpenVMS Version 6.2 New Features Manual</i>
<i>VAX Perform</i>	S	<i>Guide to OpenVMS Performance Management</i>
<i>VAX SDA</i>	P	<i>OpenVMS VAX System Dump Analyzer Utility Manual</i>
<i>VMScluster Sys</i>	S	<i>VMScluster Systems for OpenVMS</i>

¹ G = General User, S = System Manager, P = Programmer

Index

A

Abbreviating NCP commands, (S) *DECnet Mgmt Util*, 1-2

Abort, (S) *DECnet Mgmt Util*, 4-7, 4-8, 4-9, 4-12

Abort function, (P) *Debugger*, 2-6, 5-11, 14-9

Aborting a remote session, (S) *DECnet Intro*, 3-3

Aborting a transaction, (P) *Sys Svc I*, SYS1-3

Aborting job status, (S) *Sys Mgr Essentials*, 13-69

\$ABS\$ program section name

- definition, (P) *Linker*, B-16

Absolute time, (P) *Concepts*, 5-1

- as input to \$BINTIM, (P) *Sys Svc I*, SYS1-62
- as input to \$BINUTC, (P) *Sys Svc I*, SYS1-65
- combined with delta time, (G) *User*, 3-13
- converting to numeric, (P) *Sys Svc II*, SYS2-163
- default values, (G) *User*, 3-11
- in system format, (P) *Concepts*, 5-6
- rules for entering, (G) *User*, 3-11
- specifying keywords, (G) *User*, 3-12
- syntax, (G) *User*, 3-11

Absolute value of complex number, (P) *MTH\$, MTH-23*

Access

- See also Random access and Record access
- auditing of processes, (S) *Security*, 9-7
- BYPASS privilege, (S) *Security*, 4-11
- checking, (P) *Sys Svc I*, SYS1-84
- database, (G) *SW Overview*, 6-22, 7-18
- denying, (S) *Security*, 4-26
- direct, (P) *File Appl*, 1-2
- how the system determines, (S) *Security*, 4-11
- modes, (P) *RMS Ref*, 1-3
- network, (S) *DECnet Intro*, 1-1, 2-2; (S) *DECnet Mgmt*, 1-20
- network object, (S) *DECnet Intro*, 3-36
- OpenVMS systems, (G) *SW Overview*, 5-1
- performance impact of auditing, (S) *Security*, 9-12
- physical I/O, (P) *Concepts*, 9-6
- privileges bypassing ACLs, (S) *Security*, 4-28
- privileges bypassing protection codes, (S) *Security*, 4-28
- protecting network against unauthorized, (S) *DECnet Intro*, 3-34
- proxy, (S) *DECnet Intro*, 2-3

Access (cont'd)

- remote file, (S) *DECnet Intro*, 2-2; (S) *DECnet Mgmt*, 1-17, 8-1
- remote file access through command procedures, (S) *DECnet Intro*, 2-12
- remote task, (S) *DECnet Intro*, 2-14; (S) *DECnet Mgmt*, 1-19
- run-time options, (P) *RMS Ref*, 1-4
- sequential, (P) *File Appl*, 1-2, 3-17
- shared, (P) *File Appl*, 10-28
 - in a VMScluster, (P) *File Appl*, 3-32
- through ACLs, (S) *Security*, 4-17
- through GRPPRV privilege, (S) *Security*, 4-11
- through protection codes, (S) *Security*, 4-7
- through READALL privilege, (S) *Security*, 4-11
- through SYSPRV privilege, (S) *Security*, 4-11
- to deleted file data, (S) *Security*, 5-13
- to existing node, (S) *DECnet Intro*, 3-1
- to files, (P) *File Appl*, 1-29
- to process-permanent files, (P) *File Appl*, 6-19

ACCESS attributes, (P) *File Appl*, 7-3

Access categories, (S) *Security*, 4-24; (P) *File Appl*, 4-26

- See also Protection codes

Access control, (S) *DECnet Mgmt*, 8-11, 8-12

- See also Access types
- ACE order, importance of, (S) *Security*, 4-18
- assigning file defaults, (S) *Security*, 4-19
- bypassing ACLs, (S) *Security*, 4-28
- bypassing protection codes, (S) *Security*, 4-28
- commands, (S) *DECnet Mgmt*, 3-67
- comparing security profiles, (S) *Security*, 4-1
- controlling in network environment, (S) *Security*, 12-5
- default, (S) *Security*, 12-3; (S) *DECnet Mgmt*, 2-30
- default application account, (S) *Security*, 12-3
- default for inbound connection, (S) *Security*, 12-4; (S) *DECnet Mgmt*, 2-33
- default nonprivileged, (S) *DECnet Mgmt*, 1-22
- default nonprivileged DECnet account, (S) *DECnet Mgmt*, 2-33
- default privileged, (S) *DECnet Mgmt*, 1-22
- denying access through an ACL, (S) *Security*, 4-17
- denying a class of users, (S) *Security*, 8-4
- evaluating a user's access request, (S) *Security*, 4-11, 4-12

Access control (cont'd)

- explicit, (S) *Security*, 12-3
- for a network, (S) *Security*, 12-3; (S) *DECnet Mgmt*, 2-29
- for an object, (S) *DECnet Mgmt*, 2-26
- for applications, (S) *Security*, 12-4
- for circuits, (S) *DECnet Intro*, 3-37
- for connections, (S) *Security*, 12-3
- for inbound connections, (S) *DECnet Mgmt*, 2-32
- for logical links, (S) *DECnet Mgmt*, 2-30
- for network applications, (S) *DECnet Mgmt*, 1-21
- for nodes, (S) *DECnet Intro*, 3-36
- for outbound connections, (S) *DECnet Mgmt*, 2-30
- for protected objects, (S) *Security*, 4-1
- for remote command execution, (S) *DECnet Mgmt*, 2-33, 3-69
- for remote file access, (S) *DECnet Mgmt*, 1-20
- for system, (S) *DECnet Intro*, 3-36
- for task-to-task communication, (S) *DECnet Mgmt*, 1-20
- in a network environment, (S) *Security*, 12-1
- limited-access accounts, (S) *Security*, 7-4
- limiting access to an environment, (S) *Security*, 4-3, 4-18
- limiting device access, (S) *Security*, 4-18
- limiting logins, (S) *Security*, 7-1
- LOGINOUT image, (S) *DECnet Mgmt*, 2-31, 8-12
- node level, (S) *DECnet Mgmt*, 2-33, 3-70
- nonprivileged string, (S) *DECnet Mgmt*, 2-31
- object security profiles, (G) *User*, 19-3; (S) *Security*, 4-6
- object-specific considerations, (S) *Security*, 4-29
- on remote files, (S) *DECnet Intro*, 2-3
- privileged string, (S) *DECnet Mgmt*, 2-31
- protection code processing rules, (S) *Security*, 4-11
- protection code user categories, (S) *Security*, 4-8
- proxy, (S) *Security*, 12-3, 12-4
- proxy login, (S) *DECnet Mgmt*, 1-22, 2-29, 2-34, 3-71
- required by ACL editor, (S) *Sys Mgmt Util A-L*, 1-4
- routing initialization, (S) *DECnet Mgmt*, 2-29
- routing initialization passwords, (S) *Security*, 12-14
- setting default information, (S) *DECnet Mgmt*, 3-68
- system level, (S) *DECnet Mgmt*, 2-30, 3-68
- through ACLs, (S) *Security*, 4-16, 4-18
- user authorization file (UAF), (S) *DECnet Mgmt*, 8-12
- using the NCP, (S) *Security*, 12-4

Access control (cont'd)

- with Identifier ACEs, (S) *Security*, 4-16, 4-20; (S) *Sys Mgmt Util A-L*, 1-13
- with protection codes, (S) *Sys Mgmt Util A-L*, 1-12
- Access control entries
 - See ACEs
- Access control list editor
 - See ACL editor
- Access control list editor routines
 - See ACL editor routines
- Access control lists
 - See ACLs
- Access control strings, (G) *User*, 4-6, 19-7; (S) *Security*, 3-14, 12-3
 - command procedures and, (S) *Security*, 3-15
 - copying files between nodes with, (G) *User*, 4-13
 - exposing password in, (S) *Security*, 3-13
 - format, (G) *User*, 19-7
 - format in node names, (G) *User*, 4-8
 - in equivalence name, (S) *DECnet Intro*, 2-4
 - invalid, (S) *DECnet Intro*, 4-10
 - null, (S) *DECnet Intro*, 2-3
 - overriding, (G) *User*, 13-5
 - protecting information in, (G) *User*, 19-7; (S) *Security*, 3-15
 - rules for entering, (G) *User*, 4-8
 - secondary passwords with, (S) *Security*, 7-16
 - using to protect file, (S) *DECnet Intro*, 3-35
 - within command procedures, (G) *User*, 19-7
- /ACCESSED qualifier
 - in Mount utility, (S) *Sys Mgmt Util M-Z*, 2-8
- Access entry
 - in argument descriptions, (P) *Interfaces*, 1-8
- Accessibility field, (P) *File Appl*, 1-25, 1-29
 - tape file system checks, (S) *Sys Mgr Essentials*, 9-17
- Accessing restricted files, (G) *DCL N-Z*, DCLII-231
- Access list, (G) *User*, 19-5
- Access mask, (P) *Concepts*, 23-22
- Access methods
 - to argument data, (P) *Interfaces*, 1-8
- Access modes, (G) *User*, 13-9, 13-10; (P) *Interfaces*, 4-2
 - See also Record access modes
 - changing to executive, (P) *Sys Svc I*, SYS1-110
 - changing to kernel, (P) *Sys Svc I*, SYS1-112
 - displaying, (G) *User*, 13-21
 - effect on AST delivery, (P) *Concepts*, 4-8
 - executive, (G) *User*, 13-10
 - processor, (P) *Interfaces*, B-2
 - specifying, (P) *Interfaces*, 4-3
 - user, (G) *User*, 13-10
 - with AST, (P) *Concepts*, 4-5
 - with logical names, (P) *Concepts*, 10-10

- Access name table, (P) *Concepts*, 23–22
- ACCESS parameter
 - for SET NODE command, (S) *DECnet Mgmt*, 2–34
- Access protection
 - checking, (P) *Sys Svc I*, SYS1–99
- Access requirements
 - allocating devices, (S) *Security*, 5–4
 - capability object, (S) *Security*, 5–1
 - common event flag clusters, (S) *Security*, 5–2
 - directories, (S) *Security*, 5–9
 - file-oriented devices, (S) *Security*, 5–4
 - files, (S) *Security*, 5–9
 - global sections, (S) *Security*, 5–14
 - I/O channel, (S) *Security*, 5–4
 - logical name tables, (S) *Security*, 5–16
 - non-file-oriented devices, (S) *Security*, 5–5
 - queues, (S) *Security*, 5–17
 - resource domains, (S) *Security*, 5–19
 - security class objects, (S) *Security*, 5–20
 - shareable devices, (S) *Security*, 5–5
 - shared devices, (S) *Security*, 5–4
 - spooled devices, (S) *Security*, 5–5
 - unshareable devices, (S) *Security*, 5–5
 - volumes, (S) *Security*, 5–5
- Access rights block, (P) *Alpha SDA*, SDA–16
- Access specification
 - list of mask values, (P) *RMS Ref*, 13–5
- Access type
 - delete, (P) *Rec Mgmt Util*, 4–23
 - execute, (P) *Rec Mgmt Util*, 4–23
 - read, (P) *Rec Mgmt Util*, 4–23
 - write, (P) *Rec Mgmt Util*, 4–23
- Access types
 - See also Control access, Create access, Delete access, Read access, and Write access
 - abbreviations of, (S) *Security*, 4–25; (S) *Sys Mgr Essentials*, 11–8
 - ACLs and, (S) *Security*, 4–20
 - and security audit, (G) *User*, 19–11
 - associate, (S) *Security*, 5–2
 - capability class, (S) *Security*, 5–1
 - checking when writing files to tape volumes, (S) *Sys Mgr Essentials*, 9–18
 - class-dependency of, (S) *Security*, 4–25
 - common event flag clusters, (S) *Security*, 5–2
 - directories, (S) *Security*, 5–8
 - files, (S) *Security*, 5–8
 - global sections, (S) *Security*, 5–14
 - lock, (S) *Security*, 5–19
 - logical I/O, (S) *Security*, 5–4
 - logical name tables, (S) *Security*, 5–16
 - manage, (S) *Security*, 5–17
 - physical I/O, (S) *Security*, 5–4
 - protecting disk directory files, (S) *Sys Mgr Essentials*, 9–10
 - protecting disk files, (S) *Sys Mgr Essentials*, 9–6
- Access types (cont'd)
 - protection codes and, (S) *Security*, 4–25; (S) *Sys Mgr Essentials*, 11–8
 - queues, (S) *Security*, 5–17
 - read, (S) *Sys Mgr Essentials*, 9–13
 - files, (S) *Security*, 5–8
 - resource domains, (S) *Security*, 5–19
 - security audit and, (S) *Security*, 3–19
 - security class, (S) *Security*, 5–20
 - shared devices, (S) *Security*, 5–4
 - submit, (S) *Security*, 5–17
 - unshared devices, (S) *Security*, 5–4
 - volumes, (S) *Security*, 5–21
- Access violations, (P) *Alpha SDA*, SDA–21, SDA–22; (P) *VAX SDA*, SDA–21, SDA–23
- ACCESSWORKS, (G) *SW Overview*, 6–22; (P) *Environment*, 1–4
- access_bit_names data type, (P) *Interfaces*, B–2
- access_mode data type, (P) *Interfaces*, B–2
- Accounting
 - enabling image-level accounting, (S) *Sys Mgmt Util A-L*, 11–5, 11–8, 11–19
 - of detached processes, (G) *DCL N-Z*, DCLII–57
 - of terminal session, (G) *DCL N-Z*, DCLII–312
- ACCOUNTING command, (G) *DCL A-M*, DCLI–13; (S) *Sys Mgr Tuning*, 19–4; (S) *Sys Mgmt Util A-L*, 2–4
- Accounting files
 - copying records between, (S) *Sys Mgmt Util A-L*, 2–8, 2–19
 - processing to produce reports, (S) *Sys Mgmt Util A-L*, 2–9, 2–11, 2–25
 - record format of, (S) *Sys Mgmt Util A-L*, C–1
 - types of record in, (S) *Sys Mgmt Util A-L*, 2–29
- Accounting information
 - obtaining during logout, (G) *User*, 2–24
- Accounting logs
 - as security tool, (S) *Security*, 10–3
- Accounting messages
 - format of, (P) *Sys Svc I*, SYS1–147
- Accounting reports
 - brief reports, (S) *Sys Mgmt Util A-L*, 2–9
 - evaluating resource utilization, (S) *VAX Perform*, 3–3
 - full reports, (S) *Sys Mgmt Util A-L*, 2–11
 - interpreting image-level data, (S) *VAX Perform*, 3–4
 - sample image-level data, (S) *VAX Perform*, 3–3
 - summary reports, (S) *Sys Mgmt Util A-L*, 2–25
- Accounting utility (ACCOUNTING), (G) *SW Overview*, 3–11; (S) *Sys Mgr Tuning*, 19–4; (S) *Sys Mgmt Util A-L*, 2–4; (S) *Alpha Perform*, 7–1
- as network troubleshooting aid, (S) *DECnet Intro*, 4–15
- collecting data, (S) *Alpha Perform*, 7–4
- image-level, (S) *Alpha Perform*, 7–3
 - disabling, (S) *Alpha Perform*, 7–3

Accounting utility (ACCOUNTING)

image-level (cont'd)

- enabling, (S) *Alpha Perform*, 7-3
- interpreting data, (S) *Alpha Perform*, 7-5
- report generation, (S) *Alpha Perform*, 7-4

ACCOUNTNG.DAT file, (S) *Sys Mgr Tuning*, 19-3

ACCOUNTNG logical name, (S) *Sys Mgr Tuning*, 19-4

Accounts, (G) *SW Overview*, 5-1

See also Captive accounts, DECnet accounts, Open accounts, Proxy accounts, Restricted accounts, and User accounts

access, (S) *Sys Mgr Essentials*, 6-16

accessing after password expires, (S) *Security*, 3-12

adding, (S) *Sys Mgr Essentials*, 6-17, 6-18
with ADDUSER.COM, (S) *Sys Mgr Essentials*, 6-18

adding proxy logins, (S) *Sys Mgr Essentials*, 6-35

application, (S) *Security*, 12-3

auditing access, (G) *User*, 19-10; (S) *Security*, 3-17

automatic login, (S) *Sys Mgr Essentials*, 6-32

default DECnet, (S) *DECnet Intro*, 3-37

default nonprivileged DECnet, (S) *DECnet Mgmt*, 1-22, 1-23, 2-33

deleting, (S) *Sys Mgr Essentials*, 6-25

designing secure accounts, (S) *Security*, 6-6, 7-4

directory, (S) *Sys Mgr Essentials*, 6-15

disabling, (S) *Sys Mgr Essentials*, 6-27

disabling with DISUSER flag, (S) *Security*, 7-3

disguising identity, (S) *Security*, 10-4

expiration, (S) *Security*, 3-12, 3-13; (S) *Sys Mgr Essentials*, 6-42

expiration of, (G) *User*, 2-16

first login, (G) *User*, 2-4; (S) *Security*, 3-2

group, (S) *Security*, C-7

guest, (S) *Security*, 7-12, C-7

initial password, (G) *User*, 2-4; (S) *Security*, 3-1

interactive, (S) *Security*, 7-4

limited-access, (S) *Security*, 7-4

MAIL, (S) *Sys Mgr Essentials*, 6-38

maintaining, (S) *Sys Mgr Essentials*, 6-24

network objects, (S) *Security*, 12-11

open, (G) *User*, 2-7

password expiration and, (S) *Security*, 3-12

password requirements for, (S) *Security*, 3-4

passwords for multiple, (S) *Security*, 3-13

privileged, (S) *Security*, 7-6

project, (S) *Security*, 8-20, 8-21; (S) *Sys Mgr Essentials*, 6-32

proxies for groups, (S) *Security*, C-7

proxy, (S) *Security*, 7-13

renewing expired, (G) *User*, 2-17; (S) *Security*, 3-13

Accounts (cont'd)

restricted, (G) *User*, 2-7

restricting use, (S) *Sys Mgr Essentials*, 6-27

secondary password, (G) *User*, 2-5; (S)

Security, 3-3

security, (S) *Sys Mgr Essentials*, 6-16

setting duration, (S) *Security*, 7-3

setting up to use project identifiers, (S)

Security, 8-21

types of, (G) *User*, 2-6; (S) *Security*, 3-4, 7-4

user passwords, (S) *Security*, 3-2

using ADDUSER.COM, (S) *Sys Mgr Essentials*, 6-18

ACE attributes

Default, (S) *Security*, 4-20

Hidden, (S) *Security*, 4-21

None, (S) *Security*, 4-18

Nopropagate, (S) *Security*, 4-23, 4-28

Protected, (S) *Security*, 4-22, 4-23, 4-28

ACEs (access control entries), (G) *User*, 19-12;

(S) *Sys Mgmt Util A-L*, 1-3, 1-6

See also Default Protection ACEs and Identifier ACEs

adding, (S) *Security*, 4-21

adding to ACL after file is created, (S) *Sys Mgr Essentials*, 9-7

Alarm ACEs, (S) *Security*, 4-30, 9-5

application-specific, (S) *Sys Mgmt Util A-L*, 1-6

Audit ACEs, (S) *Security*, 4-30, 9-5

creating, (S) *Security*, 4-17; (P) *Concepts*, 23-21, 23-22

Creator ACEs, (S) *Security*, 5-11, 8-10, 8-21;

(S) *Sys Mgr Essentials*, 11-9; (S) *Sys Mgmt*

Util A-L, 1-9

Default Protection ACEs, (S) *Security*, 4-27,

8-16, 8-20; (S) *Sys Mgr Essentials*, 11-9;

(S) *Sys Mgmt Util A-L*, 1-11

examples, (S) *Security*, 12-22

deleting, (S) *Security*, 4-22

deleting protected ACEs, (S) *Security*, 4-22

generating audit event messages, (S) *Security*, 9-2

inserting in a list, (S) *Security*, 4-21

maintaining, (P) *Concepts*, 23-21, 23-22

none for subdirectories, (S) *Sys Mgr Essentials*, 9-12

ordering entries in an ACL, (S) *Sys Mgmt Util A-L*, 1-3

order of, (S) *Security*, 4-11, 4-18, 4-21

relationship to ACLs, (S) *Sys Mgmt Util A-L*, 1-3

replacing, (S) *Security*, 4-22

RMS limitation, (P) *RMS Ref*, 13-2

security Alarm, (S) *Sys Mgmt Util A-L*, 1-6

Security Alarm, (S) *Sys Mgr Essentials*, 11-9

security Audit, (S) *Sys Mgmt Util A-L*, 1-8

Security Audit, (S) *Sys Mgr Essentials*, 11-10

security auditing, (S) *Security*, 4-22

ACEs (access control entries) (cont'd)

- sensitive files and, (S) *Security*, 3-17
 - Subsystem ACEs, (S) *Security*, 8-8, 13-3 to 13-5; (S) *Sys Mgr Essentials*, 11-10; (S) *Sys Mgmt Util A-L*, 1-15
 - translating, (P) *Concepts*, 23-21, 23-22
 - types, (S) *Security*, 4-16; (S) *Sys Mgr Essentials*, 11-9
 - using to override default UIC protection, (S) *Sys Mgr Essentials*, 9-12
- ACLEDIT\$EDIT routine, (P) *Util Routines*, ACL-3
- ACL editor, (G) *DCL A-M*, DCLI-191; (S) *Sys Mgmt Util A-L*, 1-3
- customizing, (S) *Sys Mgmt Util A-L*, B-1
 - DCL qualifiers, (S) *Sys Mgmt Util A-L*, 1-17 to 1-19
 - displaying ACLs, (S) *Security*, 4-8
 - exiting from, (S) *Sys Mgmt Util A-L*, 1-5
 - how to use, (S) *Sys Mgmt Util A-L*, 1-3
 - invoking, (S) *Sys Mgr Essentials*, 11-11; (S) *Sys Mgmt Util A-L*, 1-4
 - keypad editing, (S) *Sys Mgmt Util A-L*, A-1
 - modifying ACLs, (S) *Security*, 4-21
 - specifying object class, (S) *Sys Mgmt Util A-L*, 1-5
- ACL editor routines, (P) *Util Routines*, ACL-1
- ACL (access control list), (P) *Util Routines*, ACL-1
- editing, (P) *Util Routines*, ACL-3
 - example of use in BLISS program, (P) *Util Routines*, ACL-1
 - manipulating, (P) *Util Routines*, ACL-1
 - options available, (P) *Util Routines*, ACL-3
- ACLEDT\$SECTION logical name, (P) *Util Routines*, ACL-5
- ACLs (access control lists), (G) *SW Overview*, 3-15; (S) *Security*, 4-8, 4-16, 8-20; (S) *Sys Mgr Essentials*, 6-16, 6-32; (P) *Concepts*, 23-2
- ACE order, (S) *Security*, 4-11, 4-18, 4-21
- alarms generated by, (S) *Security*, D-2
 - as protection basis, (P) *File Appl*, 4-26
 - assigning by default to new files, (S) *Security*, 4-19
 - auditing in C2 systems, (S) *Security*, C-8
 - building a common file, (S) *VMScluster Sys*, 5-11
 - bypassing with special rights, (S) *Security*, 4-28
 - compared with UIC protection, (P) *File Appl*, 1-33
 - conversion methods, (P) *RMS Ref*, 13-2
 - copying, (S) *Security*, 4-23
 - creating, (S) *Security*, 4-17
 - default protection, (G) *User*, 19-6; (S) *Sys Mgr Essentials*, 9-12
 - deleting, (S) *Security*, 4-22

ACLs (access control lists) (cont'd)

- deleting ACEs, (S) *Security*, 4-22
 - deleting obsolete identifiers, (S) *Security*, 8-7
 - designing, (S) *Security*, 8-4
 - displaying, (S) *Security*, 4-8, 4-20
 - effect of privileges, (S) *Security*, 4-11
 - effect on performance, (S) *Security*, 8-4
 - formatting, (P) *Sys Svc I*, SYS1-308
 - granting access, (S) *Security*, 4-17
 - impact of length on performance, (S) *Sys Mgmt Util A-L*, 1-3
 - interaction with protection codes, (S) *Security*, 4-26
 - list of supported object classes, (S) *Sys Mgmt Util A-L*, 1-3
 - management overview, (S) *Security*, 8-3
 - modifying, (S) *Security*, 4-21
 - network file sharing, (S) *Security*, 12-20
 - on public volumes, (S) *Sys Mgr Essentials*, 8-14
 - on queues, (S) *Sys Mgr Essentials*, 13-24
 - on vector capability object, (S) *Sys Mgr Tuning*, 26-8
 - priority in access evaluation, (S) *Security*, 4-11
 - protecting files, (G) *User*, 4-16
 - protection codes and, (S) *Security*, 4-17
 - protection mechanism, (G) *SW Overview*, 5-1
 - queue access rights, (S) *Security*, 5-17
 - relationship to ACEs, (S) *Sys Mgmt Util A-L*, 1-3
 - reordering entries, (S) *Security*, 4-21
 - replacing ACEs, (S) *Security*, 4-22
 - restoring default ACL, (S) *Security*, 4-23
 - restoring file default, (S) *Security*, 4-27
 - rules for ordering entries, (S) *Sys Mgmt Util A-L*, 1-3
 - security element of an object, (S) *Security*, 4-7
 - setting file protection, (S) *Security*, 8-16, 8-21
 - SHOW ACL command, (S) *Sys Mgr Essentials*, 9-5
 - system program files, (S) *Security*, 8-27
 - use with RMS control block, (P) *RMS Ref*, 13-2
- ACL section files, (S) *Sys Mgmt Util A-L*, B-1
- ACMS, (G) *SW Overview*, 7-5; (S) *Dependable*, 8-52 to 8-57; (P) *Environment*, 1-4
- See also Desktop ACMS
- dependability, (G) *SW Overview*, 2-13, 7-12
 - failure resistance, (G) *SW Overview*, 7-12
 - fault management, (G) *SW Overview*, 7-12
 - programming technology, (S) *Dependable*, 3-9
 - software, (G) *SW Overview*, 7-12
 - use with DECTp Desktop for ACMS, (G) *SW Overview*, 6-22
- ACNT privilege, (S) *Security*, A-1; (S) *DECnet Mgmt*, 5-1
- acosd routine, (P) *Portable Math*, DPML-4, B-1

acosh routine, (P) *Portable Math*, DPML-5, B-1
acos routine, (P) *Portable Math*, DPML-4, B-1
ACP (ancillary control process), (S) *DECnet Mgmt*, 5-1, 6-2; (P) *Alpha SDA*, SDA-94; (P) *VAX SDA*, SDA-105; (P) *I/O User*, 1-1
establishing values for, (S) *VAX Perform*, 5-4; (S) *Alpha Perform*, 17-3
for ODS-1 disks, (S) *VAX Perform*, 5-4; (S) *Alpha Perform*, 17-3
parameters, (S) *Alpha Perform*, 14-3
 ACP_DIRCACHE parameter, (S) *Alpha Perform*, 14-3
 ACP_HDRCACHE parameter, (S) *Alpha Perform*, 14-3
 ACP_MAPCACHE parameter, (S) *Alpha Perform*, 14-3
removing blockage, (S) *VAX Perform*, 5-12; (S) *Alpha Perform*, 18-4
volume mount, (S) *Sys Mgmt Util M-Z*, 2-30
ACP controls function
 miscellaneous disk, (P) *I/O User*, 1-34
ACP functions, (P) *I/O User*, 1-2, 1-32
 attributes, (P) *I/O User*, 1-15 to 1-18
 disk quotas, (P) *I/O User*, 1-35
 IO\$_ACCESS, (P) *I/O User*, 1-7, 1-9, 1-14, 1-25
 IO\$_ACPCONTROL, (P) *I/O User*, 1-7
 IO\$_CREATE, (P) *I/O User*, 1-9, 1-11, 1-14, 1-23
 IO\$_DEACCESS, (P) *I/O User*, 1-13, 1-14, 1-27
 IO\$_DELETE, (P) *I/O User*, 1-7, 1-28
 IO\$_MODIFY, (P) *I/O User*, 1-7, 1-11, 1-13, 1-14, 1-27
 IO\$_MOUNT, (P) *I/O User*, 1-32
 magnetic tape positioning, (P) *I/O User*, 1-33
 quota file transfer block, (P) *I/O User*, 1-35
ACP-QIO interface, (P) *I/O User*, 1-1
 See also FIBs
 access file function, (P) *I/O User*, 1-25
 access subfunction, (P) *I/O User*, 1-9
 ACP control function, (P) *I/O User*, 1-2, 1-34
 ANSI standard, (P) *I/O User*, 1-2, 1-34
 arguments, (P) *I/O User*, 1-2
 disk quota, (P) *I/O User*, 1-35
 attribute control block, (P) *I/O User*, 1-14
 attributes, (P) *I/O User*, 1-15 to 1-18
 attributes statistics block, (P) *I/O User*, 1-20
 BLISS-32 programming, (P) *I/O User*, 1-2
 create file function, (P) *I/O User*, 1-23
 disk, (P) *I/O User*, 1-24
 magnetic tape, (P) *I/O User*, 1-25
 deaccess file function, (P) *I/O User*, 1-27
 delete file function, (P) *I/O User*, 1-28
 description, (P) *I/O User*, 1-1
 directory entries, (P) *I/O User*, 1-9, 1-25
 FIB (file information block), (P) *I/O User*, 1-3
 file characteristics, (P) *I/O User*, 1-18

ACP-QIO interface (cont'd)

 function codes, (P) *I/O User*, A-1
 function modifiers, (P) *I/O User*, 1-2
 IO\$_M_ACCESS, (P) *I/O User*, 1-9, 1-23, 1-25
 IO\$_M_CREATE, (P) *I/O User*, 1-23, 1-24, 1-25
 IO\$_M_DELETE, (P) *I/O User*, 1-23, 1-24, 1-29
 IO\$_M_DMOUNT, (P) *I/O User*, 1-32, 1-34
 I/O operations, (P) *I/O User*, 1-1
 I/O status block, (P) *I/O User*, 1-36
 MACRO programming, (P) *I/O User*, 1-1
 movefile subfunction, (S) *Dependable*, 9-17; (P) *I/O User*, 1-29
 record attributes area, (P) *I/O User*, 1-18
 values, (P) *I/O User*, 1-19
 serious exception (EOT), (P) *I/O User*, 1-23, 1-26, 1-34
 status returns, (P) *I/O User*, A-1
 XQP (extended QIO processor), (P) *I/O User*, 1-1
ACP queue blocks
 See AQB's
ACP subfunctions, (P) *I/O User*, 1-7
 access, (P) *I/O User*, 1-9
 directory lookup, (P) *I/O User*, 1-7
 extend, (P) *I/O User*, 1-11, 1-36
 movefile, (P) *I/O User*, 1-27
 read/write attributes, (P) *I/O User*, 1-14
 truncate, (P) *I/O User*, 1-13
ACP system parameters
 See System parameters, ACP
ACP truncation
 determining factors, (P) *File Appl*, 3-9
 error, (P) *File Appl*, 3-9
 using the FAB\$V_TEF bit, (P) *File Appl*, 3-9
ACP_REBLDSYSD system parameter
 rebuilding system disks, (S) *VMScluster Sys*, 6-21
Acquiring software packages, (S) *Dependable*, 3-10
ACTIVATE BREAK command, (P) *Debugger*, 7-11
ACTIVATE TRACE command, (P) *Debugger*, 7-11
ACTIVATE WATCH command, (P) *Debugger*, 7-13
Activating an autostart queue, (G) *DCL A-M*, DCLI-202, DCLI-261; (G) *DCL N-Z*, DCLII-366; (S) *Sys Mgr Essentials*, 13-15, 13-16, 13-49
 on LAT queues, (S) *Sys Mgr Essentials*, 13-4
 relationship to starting an autostart queue, (S) *Sys Mgr Essentials*, 13-4
/ACTIVATING qualifier, (P) *Debugger*, 14-13
Activation
 breakpoint, (P) *Debugger*, 2-5, 3-10, 7-11
 tracepoint, (P) *Debugger*, 2-5, 7-11, 14-13
 watchpoint, (P) *Debugger*, 2-5, 7-13

- Active disks
 - backing up, (S) *Sys Mgr Essentials*, 10-63
- Active procedure, (P) *Calling Std*, 3-29
- /ACTIVE qualifier, (P) *Debugger*, 16-11, 16-24
- ACTIVE reserved word
 - plural form of component name, (S) *DECnet Intro*, 4-2
- Active sets, (S) *Sys Mgr Tuning*, 26-2
 - displaying, (S) *Sys Mgr Tuning*, 26-3
- Active-standby system kernels, (S) *Dependable*, 4-5
- Active Streams field
 - interpretations of zero reading, (P) *File Appl*, 3-29
- Active system parameters, (S) *Sys Mgr Tuning*, 14-3
- %ACTIVE_TASK built-in symbol, (P) *Debugger*, 16-11, 16-14
- Actual node name, (S) *Sys Mgmt Util A-L*, 13-55
- Actual offset value
 - avoiding use of, (P) *RMS Ref*, 2-3
- Actual port name, (S) *Sys Mgmt Util A-L*, 13-55
- Actual service name, (S) *Sys Mgmt Util A-L*, 13-55
- Ada, (G) *SW Overview*, 4-5; (G) *Compatibility*, 1-10; (P) *Environment*, 7-2, 7-3
 - data type declarations, (P) *Interfaces*, B-16
 - implementation table, (P) *Interfaces*, B-16
- Ada compiler
 - generating reentrant code, (P) *DECthreads*, 3-4
- %ADAEXC_NAME built-in symbol, (P) *Debugger*, 13-15, B-10
- Adapters
 - See also Bus adapters
 - add-on SCSI, (G) *V6.2 New Feat*, 7-9
 - booting from multiple LAN, (S) *VMScluster Sys*, 9-7
 - Ethernet, (S) *VMScluster Sys*, 3-15
 - integral SCSI, (G) *V6.2 New Feat*, 7-18
 - LAN communication, (G) *V6.2 New Feat*, 4-2
 - multiple CI, (S) *VMScluster Sys*, 3-3
 - multiple DSSI, (S) *VMScluster Sys*, 3-5
 - multiple LAN, (S) *VMScluster Sys*, 3-15, 3-17
- Adaptive pool management, (S) *Comparison*, 5-11
- Adaptive routing, (S) *DECnet Intro*, 1-3
 - network, (S) *Sys Mgr Tuning*, 21-5
- ADD (Field) command
 - CIRCUITS class, (S) *Sys Mgmt Util M-Z*, 4-19
 - CLUSTER class, (S) *Sys Mgmt Util M-Z*, 4-20
 - CONNECTIONS class, (S) *Sys Mgmt Util M-Z*, 4-21
 - COUNTERS class, (S) *Sys Mgmt Util M-Z*, 4-22
 - CREDITS class, (S) *Sys Mgmt Util M-Z*, 4-23
 - ERRORS class, (S) *Sys Mgmt Util M-Z*, 4-23
 - in Show Cluster utility, (S) *Sys Mgmt Util M-Z*, 4-19
- ADD (Field) command (cont'd)
 - LOCAL_PORTS class, (S) *Sys Mgmt Util M-Z*, 4-23
 - MEMBERS class, (S) *Sys Mgmt Util M-Z*, 4-25
 - SYSTEMS class, (S) *Sys Mgmt Util M-Z*, 4-27
- ADD CIRCUITS command
 - in Show Cluster utility, (S) *Sys Mgmt Util M-Z*, 4-11
- ADD CLUSTER command
 - in Show Cluster utility, (S) *Sys Mgmt Util M-Z*, 4-13
- ADD command, (P) *File Appl*, 10-26
 - in Install utility, (S) *Sys Mgmt Util A-L*, 11-5
- ADD CONNECTIONS command
 - in Show Cluster utility, (S) *Sys Mgmt Util M-Z*, 4-14
- ADD COUNTERS command
 - in Show Cluster utility, (S) *Sys Mgmt Util M-Z*, 4-15
- ADD CREDITS command
 - in Show Cluster utility, (S) *Sys Mgmt Util M-Z*, 4-17
- ADD ERRORS command
 - in Show Cluster utility, (S) *Sys Mgmt Util M-Z*, 4-18
- Adding a computer, (S) *VMScluster Sys*, 8-9, 8-33, 8-43
 - adjusting EXPECTED_VOTES, (S) *VMScluster Sys*, 8-36
- Adding files to the system disk, (S) *Sys Mgr Essentials*, 5-1
- Adding holder records to rights database, (P) *Sys Svc I*, SYS1-8
- Adding identifiers to rights database, (P) *Sys Svc I*, SYS1-11
- Addition
 - of decimal strings, (P) *STR\$*, STR-4
 - quadword times, (P) *LIB\$*, LIB-8
 - two's complement, (P) *LIB\$*, LIB-5
- Addition operator (+), (P) *Alpha SDA*, SDA-13; (P) *VAX SDA*, SDA-16
- ADD LOCAL_PORTS command
 - in Show Cluster utility, (S) *Sys Mgmt Util M-Z*, 4-28
- ADD MEMBERS command
 - in Show Cluster utility, (S) *Sys Mgmt Util M-Z*, 4-30
- address data type, (P) *Interfaces*, B-2
- .ADDRESS directive
 - count in image map file, (P) *Linker*, 5-4
 - image activator's processing of, (P) *Linker*, 3-24
 - linker's processing of, (P) *Linker*, 3-24
- Addresses
 - See also Node addresses
 - area number, (S) *DECnet Mgmt*, 2-1, 3-7, 3-50
 - broadcast, (S) *DECnet Mgmt*, 1-6

Addresses (cont'd)

- depositing into, (P) *Debugger*, 8-25
 - examining, (P) *Debugger*, 8-13; (P) *Alpha SDA*, SDA-48; (P) *VAX SDA*, SDA-55
 - for OpenVMS Alpha, (P) *Calling Std*, 1-4
 - for OpenVMS VAX, (P) *Calling Std*, 1-4
 - hardware, (S) *DECnet Mgmt*, 2-2, 2-14
 - multicast, (S) *DECnet Mgmt*, 1-4, 1-6
 - obtaining, (P) *Debugger*, 7-8, 8-12
 - physical, (S) *DECnet Mgmt*, 1-6, 2-2, 2-14; (S) *DECnet Mgmt Util*, 1-9, 1-10
 - specifying breakpoint on, (P) *Debugger*, 7-7
 - symbolizing, (P) *Debugger*, 8-13
 - virtual memory, (P) *Concepts*, 17-3
- ## Address expressions
- code, (P) *Debugger*, 7-6, 8-19, 10-4
 - compared to language expressions, (P) *Debugger*, 8-7
 - composite, (P) *Debugger*, 7-7
 - vector, (P) *Debugger*, 15-16
 - current entity, (P) *Debugger*, 8-8, 8-13, B-6
 - DEPOSIT command, (P) *Debugger*, 8-3
 - EVALUATE/ADDRESS command, (P) *Debugger*, 7-8, 8-12
 - EXAMINE command, (P) *Debugger*, 8-2
 - EXAMINE/SOURCE command, (P) *Debugger*, 10-4
 - logical predecessor, (P) *Debugger*, 8-8, 8-13, B-6
 - logical successor, (P) *Debugger*, 8-8, 8-13, B-6
 - SET BREAK command, (P) *Debugger*, 7-4
 - SET TRACE command, (P) *Debugger*, 7-5
 - SET WATCH command, (P) *Debugger*, 7-11
 - symbolic, (P) *Debugger*, 8-4
 - SYMBOLIZE command, (P) *Debugger*, 8-13
 - type of, (P) *Debugger*, 8-4
- ## Addressing, (S) *TCP/IP*, 2-5
- Internet, (S) *TCP/IP*, 2-6, 2-7
 - subnets, (S) *TCP/IP*, 2-6
- ## Addressing data
- recovery from errors, (S) *Dependable*, 8-21
- ## /ADDRESS qualifier, (P) *Debugger*, 12-6; (P) *Alpha SDA*, SDA-84, SDA-93, SDA-124; (P) *VAX SDA*, SDA-91, SDA-104, SDA-141
- in SET PROCESS command, (P) *Alpha SDA*, SDA-72
 - in SHOW PROCESS command, (P) *Alpha SDA*, SDA-127
- ## Address ranges
- aligning on page boundaries, (P) *Linker*, 3-23
- ## Address-related commands
- Alpha object language, (P) *Linker*, B-35
- ## Address representation, (P) *Calling Std*, 3-3
- ## Address Resolution Protocol
- See ARP
- ## Address space
- allocating by page, (P) *Concepts*, 19-8, 20-6
 - allocating in zones, (P) *Concepts*, 21-6

Address space (cont'd)

- deallocating by page, (P) *Concepts*, 19-8, 20-6, 21-2
 - zones, (P) *Concepts*, 21-6
- ## Address space number (ASN), (P) *Alpha SDA*, SDA-15
- ## address_range data type, (P) *Interfaces*, B-2
- ## ADD SYSTEMS command
- in Show Cluster utility, (S) *Sys Mgmt Util M-Z*, 4-31
- ## ADDUSER.COM command procedure, (S) *Sys Mgr Essentials*, 6-18
- ## ADD_DUMPFILE symbol, (S) *Sys Mgr Tuning*, 15-24
- ## ADD_PAGEFILEn_SIZE symbol, (S) *Sys Mgr Tuning*, 15-24
- ## ADD_PAGEFILE symbol, (S) *Sys Mgr Tuning*, 15-24
- ## ADD_ prefix for AUTOGEN, (S) *Sys Mgr Tuning*, 14-19
- ## ADD_SWAPFILEn_SIZE symbol, (S) *Sys Mgr Tuning*, 15-24
- ## ADD_SWAPFILE symbol, (S) *Sys Mgr Tuning*, 15-24
- ## ADJACENT reserved word
- plural form of component name, (S) *DECnet Intro*, 4-2
- ## Adjustment period
- definition, (S) *Alpha Perform*, 6-1
- ## Adjust Working Set fix, (S) *DECams*, 4-3
- ## AGAIN command, (P) *File Appl*, 10-11
- ## AGEN\$FEEDBACK.DAT file, (S) *Sys Mgmt Util A-L*, 6-5, 6-6
- description, (S) *Sys Mgr Tuning*, 14-11
- ## AGEN\$FEEDBACK.EXE file, (S) *Sys Mgmt Util A-L*, 6-5
- ## AGEN\$FEEDBACK_REQ_TIME logical name, (S) *Sys Mgr Tuning*, 14-21
- ## AGEN\$ files
- updating, (S) *VMScluster Sys*, 8-36
- ## AGEN\$INCLUDE_PARAMS file, (S) *VMScluster Sys*, 8-11, 8-36
- ## AGEN\$NEW_NODE_DEFAULTS.DAT file, (S) *VMScluster Sys*, 8-11
- ## AGEN\$NEW_NODE_DEFAULTS.DAT include file, (S) *VMScluster Sys*, 8-36
- ## AGEN\$NEW_SATELLITE_DEFAULTS.DAT file, (S) *VMScluster Sys*, 8-11
- ## AGEN\$NEW_SATELLITE_DEFAULTS.DAT include file, (S) *VMScluster Sys*, 8-36
- ## AGEN\$NO_AUTOCONFIGURE logical name, (G) *V6.2 New Feat*, 3-14
- ## AGEN\$NO_SPAWN logical name, (G) *V6.2 New Feat*, 3-14
- ## AGEN\$PARAMS.REPORT file, (S) *Sys Mgr Tuning*, 14-11; (S) *Sys Mgmt Util A-L*, 6-7
- sample, (S) *Sys Mgr Tuning*, 14-12

- AGEN\$REPORT_NO_INFORMATIONALS logical name, (G) *V6.2 New Feat*, 3-14
- Aggregates
- changing value of, (P) *Debugger*, 3-20
 - DEPOSIT command, (P) *Debugger*, 8-16, 8-17, 15-6, 15-7
 - displaying value of, (P) *Debugger*, 3-14
 - EXAMINE command, (P) *Debugger*, 8-16, 8-17, 15-6, 15-7
 - monitoring, (P) *Debugger*, 3-18
 - SET WATCH command, (P) *Debugger*, 7-13, 15-3
- AI (argument information)
- format, (P) *Interfaces*, 2-9; (P) *Calling Std*, 3-37
 - register, (P) *Calling Std*, 3-37
- AI (artificial intelligence), (G) *SW Overview*, 4-6
- performance-tuning techniques, (G) *SW Overview*, 7-9
- AIDs (area identification numbers)
- program example, (P) *RMS Ref*, A-19
- Air conditioning
- environmental factor of dependable computing, (S) *Dependable*, 5-3
- Alarm ACEs, (S) *Security*, 4-30; (S) *Sys Mgmt Util A-L*, 1-6
- how to use, (S) *Security*, 9-5
 - keywords, (S) *Sys Mgmt Util A-L*, 1-7
 - specifying access, (S) *Sys Mgmt Util A-L*, 1-7
- Alarm messages, (S) *Security*, D-1
- ACL event, (S) *Security*, D-2
- authorization database modification, (S) *Security*, D-2
 - break-in event, (S) *Security*, D-3
 - INSTALL event, (S) *Security*, D-5
 - login, (S) *Security*, D-5
 - login failure, (S) *Security*, D-5
 - logout, (S) *Security*, D-6
 - network connection, (S) *Security*, D-6
 - object access event, (S) *Security*, D-1
 - object creation, (S) *Security*, D-4
 - object deaccess, (S) *Security*, D-4
 - object deletion, (S) *Security*, D-4
 - privilege use, (S) *Security*, D-7
 - process control event, (S) *Security*, D-7
 - security, (S) *Sys Mgr Tuning*, 18-21
 - SET AUDIT use, (S) *Security*, D-8
 - system parameter modification, (S) *Security*, D-8
 - time modification, (S) *Security*, D-8
 - volume mount/dismount, (S) *Security*, D-6
- Alarms
- See also Security alarms
 - enabling for security, (G) *User*, 19-10
 - events triggering, (G) *User*, 19-10
- Alert
- asynchronous delivery and exception handlers, (P) *DECthreads*, cma-6
- Alert (cont'd)
- delivery, (P) *DECthreads*, cma-60
 - disabling asynchronous delivery of, (P) *DECthreads*, cma-3
 - disabling delivery of, (P) *DECthreads*, cma-5
 - enabling asynchronous delivery of, (P) *DECthreads*, cma-6
 - enabling delivery of, (P) *DECthreads*, cma-8
 - requesting delivery of, (P) *DECthreads*, cma-10
 - sending to a thread, (P) *DECthreads*, cma-60
 - using asynchronous delivery with external routines, (P) *DECthreads*, cma-3
- Alertable
- definition of, (P) *DECthreads*, cma-3
 - ensuring for matrix multiplication, (P) *DECthreads*, cma-6
- Alert delivery state
- restoring, (P) *DECthreads*, cma-9
- ALF
- See Automatic Login Facility
- ALF ADD command
- in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-10
- ALF REMOVE command
- in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-11
- ALF SHOW command
- in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-13
- Algorithm, (P) *MTH\$*, 1-3
- Algorithms
- for memory allocation, (P) *Concepts*, 21-7
- Aliases
- See DECnet, cluster aliases and Cluster aliases
- Alias file name
- assigning, (S) *Sys Mgr Essentials*, 9-10
- Alias names
- specifying for universal symbols, (P) *Linker*, 4-11, LINK-65
- Alias node addresses, (S) *DECnet Mgmt*, 1-11, 2-5, 2-26, 3-9, 8-8
- Alias node identifiers, (G) *SW Overview*, 3-18; (S) *DECnet Intro*, 3-8; (S) *DECnet Mgmt*, 1-11, 2-5, 3-9 to 3-11, 8-8
- cluster, (S) *DECnet Intro*, 3-18
 - restrictions, (S) *DECnet Mgmt*, 2-6, 8-8
 - specifying maximum logical links, (S) *DECnet Mgmt*, 3-56
 - use with objects, (S) *DECnet Mgmt*, 2-26, 3-60
- Alias node names, (S) *DECnet Intro*, 3-8; (S) *DECnet Mgmt*, 1-11, 2-5, 2-26, 3-9
- for cluster, (S) *DECnet Intro*, 2-4, 2-11
- /ALIAS qualifier
- in Backup utility, (S) *Sys Mgmt Util A-L*, 7-14
- Alias VMScluster name, (S) *Sys Mgr Essentials*, 2-15
- Aligned record layout, (P) *Calling Std*, 3-57
- Aligning data, (P) *Concepts*, 8-4

- Aligning preprinted forms, (S) *Sys Mgr Essentials*, 13-75, 13-77
- Aligning queue status, (S) *Sys Mgr Essentials*, 13-51
- Alignment, (P) *Concepts*, 22-1
 - See also Data alignment
 - natural, (P) *Concepts*, 22-2
 - on OpenVMS Alpha systems, (P) *Concepts*, 14-3
 - on OpenVMS VAX systems, (P) *Concepts*, 14-3
 - OpenVMS Alpha systems, (P) *Concepts*, 22-3
 - OpenVMS VAX, (P) *Concepts*, 22-3
 - system services, (P) *Concepts*, 22-10
 - with Bliss compiler, (P) *Concepts*, 22-5
 - with compilers, (P) *Concepts*, 22-4
 - with DEC C compiler, (P) *Concepts*, 22-4
 - with DEC Fortran compiler, (P) *Concepts*, 22-6
 - with MACRO-32 compiler, (P) *Concepts*, 22-7
 - with OpenVMS Debugger, (P) *Concepts*, 22-9
 - with PCA, (P) *Concepts*, 22-10
 - with tools, (P) *Concepts*, 22-9
 - with VEST translator, (P) *Concepts*, 22-8
- Alignment attribute, (P) *Concepts*, 21-11
- Alignment data, (S) *Sys Mgr Essentials*, 13-77
- Alignment fault data
 - getting for system process, (P) *Sys Svc II*, SYS2-92
 - getting for user image, (P) *Sys Svc II*, SYS2-80
- Alignment fault reporting
 - disabling for user image, (P) *Sys Svc II*, SYS2-385
 - disabling for user process, (P) *Sys Svc II*, SYS2-170
 - enabling for user process, (P) *Sys Svc II*, SYS2-171
 - initializing for system process, (P) *Sys Svc II*, SYS2-110
 - starting for user image, (P) *Sys Svc II*, SYS2-377
- ALL-IN-1
 - accessing the environment, (G) *SW Overview*, 5-2
 - user environments, (G) *SW Overview*, 5-8
- ALLOCATE command, (G) *User*, 12-9; (G) *DCL A-M*, DCLI-14 to DCLI-16
 - See also DEASSIGN command
 - allocating a particular type of device, (S) *Sys Mgr Essentials*, 8-9
 - debugging with two terminals, (P) *Debugger*, 13-6
 - format, (G) *User*, 12-3
 - /GENERIC qualifier, (G) *User*, 12-4
 - tape drive, (S) *Sys Mgr Essentials*, 9-21, 9-22
 - to allocate device, (S) *Sys Mgr Essentials*, 8-9
- Allocating
 - a device by logical name, (G) *User*, 12-4
 - a specific device type, (G) *User*, 12-4
- Allocating (cont'd)
 - class fields, (G) *User*, 12-10
 - devices, (G) *DCL A-M*, DCLI-14; (P) *Sys Svc I*, SYS1-22
 - disk drives, (G) *User*, 12-3; (S) *Sys Mgr Essentials*, 8-9
 - allocating a particular type of device, (S) *Sys Mgr Essentials*, 8-9
 - first available device, (G) *User*, 12-3
 - generic devices, (G) *User*, 12-4
 - physical device, (G) *User*, 12-3
 - space on disk volume, (S) *Sys Mgr Essentials*, 8-52
 - tape drives, (G) *User*, 12-3; (S) *Sys Mgr Essentials*, 8-9
 - virtual memory for images, (P) *Linker*, 3-17
- Allocation, (P) *File Appl*, 3-24, 4-34, A-1
- ALLOCATION attribute, (P) *Rec Mgmt Util*, 4-6, 4-17; (P) *File Appl*, 3-25, 4-34
- Allocation classes, (P) *Sys Svc I*, SYS1-329
 - assigning value to computers, (S) *VMScluster Sys*, 6-9
 - assigning value to HSC subsystems, (S) *VMScluster Sys*, 6-9
 - assigning value to HSD subsystems, (S) *VMScluster Sys*, 6-10
 - assigning value to HSJ subsystems, (S) *VMScluster Sys*, 6-10
 - purpose of, (S) *VMScluster Sys*, 6-6
 - rules for specifying, (S) *VMScluster Sys*, 6-8
 - sample configurations, (S) *VMScluster Sys*, 6-7
 - setting for SCSI configurations, (G) *V6.2 New Feat*, 7-4, 7-20, 7-22
 - using in a distributed environment, (S) *VMScluster Sys*, 6-24
- Allocation-quantity option, (P) *File Appl*, 4-34
- ALLOCLASS system parameter, (S) *VMScluster Sys*, 6-9
- ALL parameter
 - with NCP SET command, (S) *DECnet Intro*, 3-33
- /ALL qualifier, (P) *Alpha SDA*, SDA-48, SDA-107, SDA-112, SDA-127, SDA-139, SDA-151, SDA-157; (P) *VAX SDA*, SDA-55, SDA-122, SDA-127, SDA-131, SDA-148, SDA-160, SDA-177, SDA-181
- ALLSPOOL privilege, (S) *Security*, A-2
- ALPHA\$LIBRARY logical name, (P) *Linker*, 1-9
- ALPHA\$LOADABLE_IMAGES logical name, (P) *Linker*, 2-18, LINK-34
- Alpha Applications Catalog, (G) *Compatibility*, 1-9, 3-3
- Alpha assembly language, (P) *Environment*, 7-8
- Alpha installation, (S) *DECcmds*, A-4 to A-6
- Alphanumeric UICs, (S) *Security*, 4-2
- Alpha object language, (P) *Linker*, B-1
 - address-related commands, (P) *Linker*, B-35

- Alpha object language (cont'd)
 - conditional store commands, (P) *Linker*, B-35, B-40
 - control commands, (P) *Linker*, B-34
 - data structures, (P) *Linker*, B-2
 - debugger information record format, (P) *Linker*, B-45
 - end-of-module record format, (P) *Linker*, B-42
 - instruction-related commands, (P) *Linker*, B-37
 - operator commands, (P) *Linker*, B-32
 - stack commands, (P) *Linker*, B-28
 - store commands, (P) *Linker*, B-29
 - text information and relocation records, (P) *Linker*, B-27
 - traceback information record format, (P) *Linker*, B-45
- Alpha primary bootstrap (APB), (S) *VMScluster Sys*, 9-6
- Alpha Resource Centers (ARCs)
 - See Business Partner Development Assistance centers
- Alpha systems
 - See also Systems and OpenVMS systems
 - DCL commands unsupported
 - See DCL
 - default editor, (S) *Comparison*, B-2
 - differences in system management from VAX systems
 - overview, (S) *Comparison*, 1-2
 - OpenVMS binaries
 - on compact disc, (S) *Comparison*, 2-24
 - OpenVMS documentation
 - on compact disc, (S) *Comparison*, 2-24
 - pagelet size, (S) *Comparison*, 1-3
 - page size, (S) *Comparison*, 1-3
 - performance, (S) *Comparison*, A-1 to A-10
 - adaptive pool management, (S) *Comparison*, 5-11
 - improving for images, (S) *Comparison*, 5-13
 - system parameter measurement changes for larger page size, (S) *Comparison*, 5-1
 - use of page or pagelet values by utilities and commands, (S) *Comparison*, 5-7
 - virtual I/O cache, (S) *Comparison*, 5-17
 - run-time libraries, (S) *Comparison*, B-4
 - symmetric multiprocessing configurations, (S) *Comparison*, 2-18
- ALPHAVMSSYS.OLD file, (S) *Sys Mgmt Util A-L*, 6-7
- ALPHAVMSSYS.PAR file, (S) *Sys Mgr Essentials*, 4-2; (S) *Sys Mgr Tuning*, 14-3; (S) *Sys Mgmt Util A-L*, 6-7
- created by CLUSTER_CONFIG.COM, (S) *VMScluster Sys*, 8-1
- ALPHAVMSSYS.PAR file (cont'd)
 - initializing parameters at boot time, (S) *Sys Mgr Tuning*, 14-36
- Alternate adapter booting for satellite nodes, (S) *Dependable*, 7-9
- Alternate indexes, (P) *Rec Mgmt Util*, 4-28; (P) *File Appl*, 3-22
- structure, (P) *Rec Mgmt Util*, 1-3
- Alternate Root
 - VMSINSTAL.COM option, (S) *Sys Mgr Essentials*, 3-18
 - restriction, (S) *Sys Mgr Essentials*, 3-18
 - specifying for software installations, (S) *Sys Mgr Essentials*, 3-12
- Alternate root directory
 - adding to an existing system disk, (S) *Sys Mgr Essentials*, 2-31
- Alternate startup command procedure
 - specifying, (S) *Sys Mgr Essentials*, 4-12
 - as the default, (S) *Sys Mgr Essentials*, 4-13
- Alternate Working Device
 - VMSINSTAL.COM option, (S) *Sys Mgr Essentials*, 3-14
- ALTMODE key, (P) *I/O User*, 5-21
- ALTPRI privilege, (S) *Security*, A-2; (S) *Alpha Perform*, 15-1
- AMB symbol, (P) *VAX SDA*, SDA-17
- AMDS\$_DEFS.DAT files, (S) *DECams*, B-1
- AMDS\$APPLIC_CUSTOMIZE.DAT file, (S) *DECams*, 5-1
- AMDS\$COMM.EXE file, (S) *DECams*, B-1
- AMDS\$COMMBUFOVF logical name, (S) *DECams*, 5-17
- AMDS\$COMM process quotas, (S) *DECams*, 5-2
- AMDS\$COMM_BUFFER_SIZE logical name, (S) *DECams*, 5-16, B-2
- AMDS\$COMM_READS logical name, (S) *DECams*, 5-16, B-2
- AMDS\$CONFIG logical name, (S) *DECams*, B-2, B-3
- AMDS\$CONSOLE.EXE file, (S) *DECams*, B-1
- AMDS\$CONSOLE.UID file, (S) *DECams*, B-1
- AMDS\$CONSOLE_ACCESS.DAT file, (S) *DECams*, 1-4, A-14, B-1
- AMDS\$DEVICE logical name, (S) *DECams*, B-3
- AMDS\$DRIVER_ACCESS.DAT file, (S) *DECams*, 1-4, A-13, B-3
- example, (S) *DECams*, 1-8
- AMDS\$EVENT_LOG.LOG file, (S) *DECams*, 2-6, B-4
- AMDS\$GROUP_NAME logical name, (S) *DECams*, 1-8, B-3
- AMDS\$IVP.COM file, (S) *DECams*, B-2, B-3
- AMDS\$LOCK_LOG.LOG file, (S) *DECams*, B-4

- AMDS\$LOGICALS.COM command procedure, (S) *DECams*, 1-8
- AMDS\$LOGICALS.COM file, (S) *DECams*, B-1, B-3
- AMDS\$LOG logical name, (S) *DECams*, B-2
- AMDS\$NUM_DL_READS logical name, (S) *DECams*, B-3
- AMDS\$RM_DEFAULT_INTERVAL logical name, (S) *DECams*, B-4
- AMDS\$RM_OPCOM_READ logical name, (S) *DECams*, B-4
- AMDS\$RM_OPCOM_WRITE logical name, (S) *DECams*, B-4
- AMDS\$RM_SECONDARY_INTERVAL logical name, (S) *DECams*, B-4
- AMDS\$STARTUP.COM command procedure, (S) *DECams*, A-14
- AMDS\$STARTUP.COM file, (S) *DECams*, B-2
- AMDS\$THRESHOLD_DEFS.DAT file, (S) *DECams*, 5-9
- AMDS\$VMS*-.LIB files, (S) *DECams*, B-2
- AMDS062.RELEASE_NOTES, (S) *DECams*, B-1, B-3
- American National Standards Institute
See ANSI
- Ampersand (&)
in symbol definitions, (G) *User*, 14-32 to 14-33
- Analysis section, (P) *File Appl*, 4-4, 10-1, 10-26
- ANALYSIS_OF_AREA section, (P) *File Appl*, 10-1, 10-22
- ANALYSIS_OF_KEY section, (P) *File Appl*, 10-1, 10-22
- ANALYZE/AUDIT
See Audit Analysis utility
- ANALYZE/AUDIT command, (G) *DCL A-M*, DCLI-17; (S) *Security*, 9-18
generating security reports, (S) *Sys Mgr Tuning*, 18-29
qualifier summary, (S) *Security*, 9-19
- ANALYZE command, (P) *Alpha SDA*, SDA-30 to SDA-36; (P) *VAX SDA*, SDA-35 to SDA-41
/CRASH_DUMP qualifier, (G) *DCL A-M*, DCLI-18
- ANALYZE/CRASH_DUMP command, (P) *VAX SDA*, SDA-9
- ANALYZE/DISK_STRUCTURE command
erasing home blocks, (G) *V6.2 New Feat*, 3-22
- Analyze/Disk_Structure utility, (G) *DCL A-M*, DCLI-19
- Analyze/Disk_Structure utility (ANALYZE/DISK_STRUCTURE)
builds BITMAP.SYS file, (S) *Sys Mgr Tuning*, A-8
checks validity of files, (S) *Sys Mgr Tuning*, A-8
commands, (S) *Sys Mgr Essentials*, 8-56
creates version of quota file, (S) *Sys Mgr Tuning*, A-9
- Analyze/Disk_Structure utility (ANALYZE/DISK_STRUCTURE) (cont'd)
creating disk usage file, (S) *Sys Mgr Essentials*, 8-56
detecting errors, (S) *Sys Mgmt Util A-L*, 3-3
directing output, (S) *Sys Mgr Essentials*, 8-56
file recovery, (S) *Sys Mgmt Util A-L*, 3-4
files used by, (S) *Sys Mgr Tuning*, A-4
identification record, (S) *Sys Mgr Essentials*, 8-56
invoking, (S) *Sys Mgmt Util A-L*, 3-6
listing file information, (S) *Sys Mgr Essentials*, 8-56
qualifiers, (S) *Sys Mgmt Util A-L*, 3-7 to 3-11
recovering lost files, (S) *Sys Mgr Essentials*, 8-57
repairing disk errors, (S) *Sys Mgr Essentials*, 8-57
reporting disk errors, (S) *Sys Mgr Essentials*, 8-56
uses of, (S) *Sys Mgr Essentials*, 8-55
uses VOLSET.SYS to locate volumes in set, (S) *Sys Mgr Tuning*, A-9
verifies files in directory structure, (S) *Sys Mgr Tuning*, A-9
- ANALYZE/ERROR (ERF) utility
in mixed-architecture VMScluster system, (G) *Compatibility*, 2-10
- ANALYZE/ERROR_LOG command, (G) *DCL A-M*, DCLI-20; (S) *Sys Mgr Tuning*, 18-5; (S) *Sys Mgmt Util A-L*, 10-4
error logging, (S) *VMScluster Sys*, C-27
Error Log utility, (S) *Sys Mgr Tuning*, 18-6
excluding unknown entries, (S) *Sys Mgr Tuning*, 18-8
specifying output, (S) *Sys Mgr Tuning*, 18-7
- ANALYZE/IMAGE command, (G) *DCL A-M*, DCLI-21 to DCLI-23; (G) *Compatibility*, A-1
examining image files, (P) *Linker*, 1-12
listing the image sections in an image, (P) *Linker*, 3-20
- ANALYZE/IMAGE utility
in mixed-architecture VMScluster system, (G) *Compatibility*, 2-10
- ANALYZE/MEDIA command, (G) *DCL A-M*, DCLI-24
to invoke Bad Block Locator utility, (S) *Sys Mgr Essentials*, 8-64
- ANALYZE/OBJECT command, (G) *DCL A-M*, DCLI-25 to DCLI-28
examining object modules, (P) *Linker*, 1-6
- ANALYZE/PROCESS command, (G) *Compatibility*, A-1
- ANALYZE/PROCESS_DUMP command, (G) *DCL A-M*, DCLI-29 to DCLI-32

ANALYZE/RMS_FILE command, (G) *DCL A-M*, DCLI-33; (P) *Rec Mgmt Util*, 1-9

/CHECK qualifier, (P) *Rec Mgmt Util*, 1-11

comparing /SUMMARY qualifier with /CHECK qualifier, (P) *Rec Mgmt Util*, 1-15

default output file name, (P) *Rec Mgmt Util*, 1-13

example of using /STATISTICS qualifier with wildcard characters, (P) *Rec Mgmt Util*, 1-13

/FDL qualifier, (P) *Rec Mgmt Util*, 1-11

in network operations, (S) *DECnet Intro*, 2-8

/INTERACTIVE qualifier, (P) *Rec Mgmt Util*, 1-1, 1-12

output file default name, (P) *Rec Mgmt Util*, 1-13

/OUTPUT qualifier, (P) *Rec Mgmt Util*, 1-12

/RU_JOURNAL qualifier, (P) *Rec Mgmt Util*, 1-13

/STATISTICS qualifier, (P) *Rec Mgmt Util*, 1-14

/SUMMARY qualifier, (P) *Rec Mgmt Util*, 1-15

user response to errors, (P) *Rec Mgmt Util*, 1-7

using /INTERACTIVE qualifier with /OUTPUT qualifier, (P) *Rec Mgmt Util*, 1-13

using /RU_JOURNAL qualifier with /OUTPUT qualifier, (P) *Rec Mgmt Util*, 1-13

using /STATISTICS qualifier with /OUTPUT qualifier, (P) *Rec Mgmt Util*, 1-13

using /SUMMARY qualifier with /OUTPUT qualifier, (P) *Rec Mgmt Util*, 1-13

using to obtain information about RMS Journaling, (P) *Rec Mgmt Util*, 1-1

Analyze/RMS_File utility (ANALYZE/RMS_FILE), (P) *Environment*, 10-18; (P) *Rec Mgmt Util*, 4-37; (P) *File Appl*, 1-35, 10-1, 10-26

AGAIN command, (P) *Rec Mgmt Util*, 1-16

ANALYSIS_OF_AREA section, (P) *Rec Mgmt Util*, 4-3

ANALYSIS_OF_KEY section, (P) *Rec Mgmt Util*, 4-4

analyzing file structure interactively, (P) *Rec Mgmt Util*, 1-1

BACK command, (P) *Rec Mgmt Util*, 1-16

commands, (P) *File Appl*, 10-11

creating FDL files, (P) *Rec Mgmt Util*, 1-1, 6-1

default file type, (P) *File Appl*, 10-5

directing output, (P) *Rec Mgmt Util*, 1-9

DOWN command, (P) *Rec Mgmt Util*, 1-17

DUMP command, (P) *Rec Mgmt Util*, 1-18

duplicate key values, (P) *Rec Mgmt Util*, 4-5

error conditions, (P) *Rec Mgmt Util*, 1-7

examining prologs, (P) *File Appl*, 3-19

examples, (P) *Rec Mgmt Util*, 1-25

analyzing a remote file, (P) *Rec Mgmt Util*, 1-25

EXIT command, (P) *Rec Mgmt Util*, 1-18

exiting from, (P) *Rec Mgmt Util*, 1-9, 1-18

Analyze/RMS_File utility (ANALYZE/RMS_FILE) (cont'd)

file optimizing, (P) *File Appl*, 4-4

FIRST command, (P) *Rec Mgmt Util*, 1-19

HELP command, (P) *Rec Mgmt Util*, 1-19

invoking, (P) *Rec Mgmt Util*, 1-9

list of functions, (P) *Rec Mgmt Util*, 1-9

NEXT command, (P) *Rec Mgmt Util*, 1-20

POSITION/BUCKET command, (P) *Rec Mgmt Util*, 1-20

POSITION/RECORD command, (P) *Rec Mgmt Util*, 1-22

REST command, (P) *Rec Mgmt Util*, 1-23

restrictions, (P) *Rec Mgmt Util*, 1-10

TOP command, (P) *Rec Mgmt Util*, 1-23

UP command, (P) *Rec Mgmt Util*, 1-23

using with DECnet, (P) *Rec Mgmt Util*, 1-6

with FDL files, (P) *File Appl*, 4-2

ANALYZE/SYSTEM command, (G) *DCL A-M*, DCLI-34; (P) *VAX SDA*, SDA-4, SDA-35

Analyzing

- communications options, (S) *Dependable*, 3-5 to 3-7
- dependability constraints, (S) *Dependable*, 4-1
- dependability requirements, (S) *Dependable*, 2-1 to 2-9
- dump files, (G) *DCL A-M*, DCLI-29
- environmental options, (S) *Dependable*, 3-2 to 3-3
- global symbol tables, (G) *DCL A-M*, DCLI-22
- hardware options, (S) *Dependable*, 3-3 to 3-5
- image file, (G) *DCL A-M*, DCLI-21
- image file fixup section, (G) *DCL A-M*, DCLI-22
- image file patch text records, (G) *DCL A-M*, DCLI-23
- object files, (G) *DCL A-M*, DCLI-25 to DCLI-28
- object module, (G) *DCL A-M*, DCLI-25
- operational procedures options, (S) *Dependable*, 3-12 to 3-14
- output converter, (G) *DCL A-M*, DCLI-66
- processing options, (G) *DCL A-M*, DCLI-70
- patch text record, (G) *DCL A-M*, DCLI-23
- personnel options, (S) *Dependable*, 3-15 to 3-16
- restrictions, (G) *DCL A-M*, DCLI-29
- shareable image file, (G) *DCL A-M*, DCLI-21
- software options, (S) *Dependable*, 3-7 to 3-12

Analyzing a crash dump, (S) *Sys Mgr Tuning*, 15-11

See also Crash dumps and System failures in system startup, (S) *Sys Mgr Essentials*, 5-13; (S) *Sys Mgr Tuning*, 15-15

privileges required, (P) *VAX SDA*, SDA-35

requirements, (P) *VAX SDA*, SDA-8

- Analyzing a running system, (P) *VAX SDA*, SDA-41
 - See also Systems
 - privileges required, (P) *VAX SDA*, SDA-11, SDA-35
- Ancillary control process
 - See ACP
- AND operator (&), (P) *Alpha SDA*, SDA-13; (P) *VAX SDA*, SDA-16
- .ANL file type, (P) *Rec Mgmt Util*, 1-13; (P) *File Appl*, 10-5
- Announcements
 - displaying system, (S) *Sys Mgr Essentials*, 5-15
- Anonymous, (S) *TCP/IP*, 5-7
 - FTP service, (S) *TCP/IP*, 3-3
 - qualifier, (S) *TCP/IP*, 5-7, 5-9
- Anonymous account, (S) *Sys Mgr Tuning*, 21-14
- ANSI (American National Standards Institute), (G) *SW Overview*, 2-2, 6-10, A-1
- ANSI escape sequence, (P) *I/O User*, B-9
- ANSI-labeled magnetic tape
 - See Tapes
- ANSI magnetic tape
 - data, (P) *File Appl*, 1-17
- Answer file (for software installation), (S) *Sys Mgr Essentials*, 3-14
- ANY_CYLINDER option, (P) *File Appl*, 4-35
- AP (argument pointer), (P) *VAX SDA*, SDA-17
- APB.EXE file, (S) *Sys Mgr Essentials*, 4-18
 - role in boot process, (S) *Sys Mgr Essentials*, 4-2
- %AP built-in symbol, (P) *Debugger*, 8-22, B-4
- API errors, reporting, (P) *DECthreads*, 3-9
- APL, (G) *SW Overview*, 4-5; (P) *Environment*, 7-4
 - data type declarations, (P) *Interfaces*, B-19
 - implementation table, (P) *Interfaces*, B-19
- Apostrophe (')
 - in symbol definitions, (G) *User*, 14-31, 14-32
- Append access
 - use of RAB\$V_EOF option, (P) *RMS Ref*, 6-12
- APPEND command, (G) *DCL A-M*, DCLI-35 to DCLI-39
 - in network operations, (S) *DECnet Intro*, 2-6
 - using with DECwindows compound documents, (G) *DCL A-M*, DCLI-35
- AppleShare, (G) *SW Overview*, 6-25
- AppleTalk, (G) *SW Overview*, 1-9, 6-18
 - protocols, (G) *SW Overview*, 6-25
- Application code sharing, (S) *Alpha Perform*, 1-5
- Application compatibility
 - in mixed-architecture VMScluster system, (G) *Compatibility*, 4-18
 - nonprivileged applications, (G) *Compatibility*, 4-14
 - privileged applications, (G) *Compatibility*, 4-14
- Application compatibility (cont'd)
 - with future OpenVMS Alpha releases, (G) *Compatibility*, 4-14
- Application Control and Management System
 - See ACMS
- Application design, (P) *File Appl*, 2-1, 3-1 to 3-3
- Application layers, (S) *TCP/IP*, 2-3
- Application port, (S) *Sys Mgmt Util A-L*, 13-10, 13-35, 13-37
 - displaying, (S) *Sys Mgmt Util A-L*, 13-52
 - mapping, (S) *Sys Mgmt Util A-L*, 13-37
- Applications
 - assessing portability, (G) *Compatibility*, 4-1
 - available third-party, (G) *Compatibility*, 3-3
 - catalog, (G) *Compatibility*, 3-3
 - characterization consulting from Digital, (S) *Dependable*, 10-1
 - components, (G) *SW Overview*, 4-2
 - connecting to LAT ports, (P) *I/O User*, 5-49
 - DECwindows Motif, (G) *SW Overview*, 5-6
 - dependability characteristics, (S) *Dependable*, 8-1
 - dependability features of application software, (S) *Dependable*, 8-35 to 8-58
 - developing, (G) *SW Overview*, 4-1
 - Digital, (G) *Compatibility*, 3-3
 - distributed, (G) *SW Overview*, 2-6; (P) *Environment*, 1-3, 3-1, 3-5, 7-1
 - for mixed-architecture VMScluster systems, (G) *Compatibility*, 4-15
 - graphical user interface, (G) *SW Overview*, 4-17
 - guidelines for new program development, (G) *Compatibility*, 4-14
 - managing shared information, (S) *Dependable*, 8-58 to 8-61
 - mixing native Alpha and translated images, (G) *Compatibility*, 3-8
 - object-oriented, (G) *SW Overview*, 6-15
 - OpenVMS, (G) *SW Overview*, 1-2
 - portable, (G) *SW Overview*, 2-3, 4-3, 5-1; (P) *Environment*, 2-1
 - POSIX, (G) *SW Overview*, 2-4, 3-3, 4-3
 - POSIX for OpenVMS Alpha, (P) *Environment*, 2-2
 - POSIX for OpenVMS VAX, (P) *Environment*, 2-2
 - prototyping, (S) *Dependable*, 8-31 to 8-33
 - real-time, (G) *SW Overview*, 4-18
 - recompiling and relinking documentation, (G) *Compatibility*, 3-9
 - running locally, (G) *DCL N-Z*, DCLII-131
 - running remotely, (G) *DCL N-Z*, DCLII-131
 - scaling considerations, (S) *Dependable*, 8-13
 - software performance, (S) *Dependable*, 4-13
 - synchronization techniques, (S) *Dependable*, 8-17

Applications (cont'd)

- TCP/IP, (G) *V6.2 New Feat*, 3-23; (S) *Sys Mgr Tuning*, 21-13; (S) *TCP/IP*, 1-1, 3-1
- testing with DEC Test Manager, (S) *Dependable*, 8-59
- testing with PCA, (S) *Dependable*, 8-59
- three-dimensional graphics support, (G) *SW Overview*, 6-16
- transaction-processing, (G) *SW Overview*, 2-13
- VAX dependency checklist, (G) *Compatibility*, 4-2
- Application service, (S) *Sys Mgmt Util A-L*, 13-10, 13-14, 13-36, 13-39
 - defined, (S) *Sys Mgmt Util A-L*, 13-16
 - setting up, (S) *Sys Mgmt Util A-L*, 13-36
- AP symbol, (P) *VAX SDA*, SDA-17
- AQBs (ACP queue blocks), (P) *Alpha SDA*, SDA-95; (P) *VAX SDA*, SDA-106
- Arbitration rules
 - for control of SCSI bus, (G) *V6.2 New Feat*, 7-36
 - modifying the effect of, (G) *V6.2 New Feat*, 7-36
- ARB symbol, (P) *Alpha SDA*, SDA-16
- Arc cosine
 - in degrees, (P) *MTH\$*, MTH-6, MTH-70
 - in radians, (P) *MTH\$*, MTH-3, MTH-68
- Architecture
 - atomic operations, (G) *Compatibility*, 1-9
 - CISC, (G) *Compatibility*, 1-9
 - dependencies, (G) *Compatibility*, 4-2
 - differences, (G) *Compatibility*, 1-9
 - RISC, (G) *Compatibility*, 1-9
 - semantic guarantees, (G) *Compatibility*, 1-9
- Architectures
 - Alpha, (G) *SW Overview*, 1-11
 - CISC, (G) *SW Overview*, 1-11
 - determining type using F\$GETSYI lexical function, (S) *Comparison*, 2-7
 - RISC, (G) *SW Overview*, 1-11
 - VAX, (G) *SW Overview*, 1-11
 - VMScluster, (S) *VMScluster Sys*, 2-1
- Archive files
 - analyzing security-relevant events, (S) *Security*, 9-16
 - enabling remote, (S) *Security*, 9-16
 - for security event messages, (S) *Security*, 9-15
- Archiving backup data, (S) *Dependable*, 9-16
- ARCH_NAME argument
 - to F\$GETSYI lexical function, (S) *Comparison*, 2-8
- ARCH_NAME keyword
 - determining host architecture, (G) *Compatibility*, 4-13
- ARCH_TYPE argument
 - to F\$GETSYI lexical function, (S) *Comparison*, 2-8

ARCH_TYPE keyword

- determining host architecture, (G) *Compatibility*, 4-13

Arc sine

- in degrees, (P) *MTH\$*, MTH-11, MTH-74
- in radians, (P) *MTH\$*, MTH-9, MTH-72

Arc tangent

- hyperbolic, (P) *MTH\$*, MTH-21, MTH-84
- in degrees, (P) *MTH\$*, MTH-15, MTH-19, MTH-78, MTH-82
- in radians, (P) *MTH\$*, MTH-13, MTH-17, MTH-76, MTH-80

AREA attributes, (P) *Rec Mgmt Util*, 4-26, 4-27

Area descriptors

- how affected by extending index file, (P) *RMS Ref*, RMS-37

AREA DESCRIPTOR structure, (P) *File Appl*, 10-16

Area extension size, (P) *Concepts*, 21-9

Area identification numbers

- See AIDs

Area options, (P) *File Appl*, 4-34

AREA primary sections

- ordering requirement, (P) *Rec Mgmt Util*, 6-1

Area routers

- See Routers, Level 2

Area routing, (S) *DECnet Intro*, 1-3

Areas, (S) *DECnet Intro*, 1-3; (S) *DECnet Mgmt*, 1-2; (P) *File Appl*, 3-24

- default number, (S) *DECnet Mgmt*, 2-1, 3-7
- defining multiple in an FDL file, (P) *File Appl*, 3-25

- definition, (S) *DECnet Mgmt*, 2-18

- multiple on a volume set, (P) *File Appl*, 3-24
- number, (S) *DECnet Intro*, 3-12, 3-33; (S) *DECnet Mgmt*, 2-1, 2-17, 2-18, 3-7, 3-50

- path control parameters, (S) *DECnet Mgmt*, 3-54

Argument blocks, (P) *Modular Proc*, 6-3

Argument data types, (P) *Calling Std*, 4-1

Argument descriptors

- See DSCs

Argument home area, (P) *Calling Std*, 3-12

Argument information

- See AI

Argument items

- for Alpha, (P) *Calling Std*, 3-48

Argument keywords

- delimiting for RMS, (P) *RMS Ref*, A-9

Argument lists, (P) *Interfaces*, 1-7, 2-9; (P) *Calling Std*, 3-12, 3-37

- count field, (P) *RMS Ref*, 2-4
- creating, (P) *Interfaces*, A-4

- definition, (P) *Calling Std*, 1-4

- description, (P) *RMS Ref*, 2-4

- error routine address field, (P) *RMS Ref*, 2-4

- evaluation, (P) *Calling Std*, 2-5

Argument lists (cont'd)

- for AST service routine, (P) *Concepts*, 4-6
- for condition handler, (P) *Concepts*, 13-27
- format, (P) *Calling Std*, 2-4
- for VAX, (P) *Calling Std*, 2-3
- generic macro generated, (P) *Interfaces*, A-1
- interpreting, (P) *Calling Std*, 2-4
- new FAB address field, (P) *RMS Ref*, 2-5
- passing to record management services, (P) *RMS Ref*, A-9
- passing to service, (P) *RMS Ref*, A-9
- success routine address field, (P) *RMS Ref*, 2-4
- using macros, (P) *Interfaces*, A-2

Argument mechanisms, (P) *Calling Std*, 6-12

Argument order

- Alpha evaluation, (P) *Calling Std*, 3-52

Argument passing

- for RTL routines, (P) *Interfaces*, 3-4
- for system services, (P) *Interfaces*, 4-4
- mechanisms, (P) *Interfaces*, 2-11
 - by descriptor, (P) *Interfaces*, 2-15
 - by reference, (P) *Interfaces*, 2-14
 - by value, (P) *Interfaces*, 2-13

Argument pointer

- See AP

Arguments, (P) *Interfaces*, 1-7; (P) *Calling Std*, 3-12, 3-48

- adding new, (P) *Modular Proc*, 6-2
- delimiters for RMS, (P) *RMS Ref*, A-9
- device- or function-dependent, (P) *I/O User*, 1-2
- explicit, (P) *Modular Proc*, 2-4
- for initialization and control block store macros, (P) *RMS Ref*, A-7
- implicit, (P) *Modular Proc*, 2-4
- list, (P) *I/O User*, A-1
- mechanism vector, (P) *Concepts*, 13-35
- optional, (P) *Modular Proc*, 2-10, A-2
- order, (P) *Modular Proc*, 2-10, A-2
- passed in memory, (P) *Calling Std*, 3-9, 3-12
- passing, (P) *RMS Ref*, 1-3
- program, (P) *Debugger*, 2-2
- separator in RMS coding, (P) *RMS Ref*, A-6
- specifying, (P) *Interfaces*, A-4
- specifying as run-time values, (P) *RMS Ref*, A-8
- to FABs, (P) *RMS Ref*, 1-4
- to RABs, (P) *RMS Ref*, 1-5

Arguments heading

- in routine documentation, (P) *Interfaces*, 1-6

Argument substitutions, (P) *SMG\$*, 5-14

Argument values

- passed to AST-level completion routine, (P) *RMS Ref*, 2-4

Argument vectors

- mechanism, (P) *Calling Std*, 6-13

arg_list data type, (P) *Interfaces*, B-2

Arithmetic

- See also Condition handlers

- using system routines, (P) *Environment*, 10-2

Arithmetic exceptions

- getting information about, (P) *Sys Svc II*, SYS2-82

- on Alpha systems, (P) *Concepts*, 13-13

Arithmetic operations, (P) *SMG\$*, 5-15

Arithmetic operators, (P) *Alpha SDA*, SDA-12;

- (P) *VAX SDA*, SDA-16

- shifting (@), (P) *VAX SDA*, SDA-17

Arithmetic shifting operator (@), (P) *Alpha SDA*, SDA-13

ARP (Address Resolution Protocol), (S) *TCP/IP*, 2-7

Array descriptors, (P) *Calling Std*, 5-4

Arrays

- conversion of, (P) *MTH\$*, MTH-63

- mechanism, (P) *Concepts*, 13-35

- virtual address, (P) *Concepts*, 19-10, 20-8

Array types, (P) *Debugger*, 3-14, 3-17, 3-18, 8-16

- vector register, (P) *Debugger*, 15-6

Arrow keys

- definition for, (S) *Sys Mgmt Util M-Z*, 4-53

- functions of, (S) *Sys Mgr Tuning*, 20-7; (S)

- Sys Mgmt Util M-Z*, B-3

- moving cursor within DCL command line, (G) *User*, 3-19

- recalling commands with, (G) *User*, 3-14, 3-19

Artificial intelligence

- See also AI

- VAX OPS5, (S) *Dependable*, 3-9

ASBs (asynchronous save blocks), (P) *Alpha SDA*, SDA-75; (P) *VAX SDA*, SDA-80

ASCII (American Standard Code for Information Interchange)

- "a" character set, (G) *User*, 4-11, B-1; (P) *File Appl*, 1-20

- character set, (G) *User*, B-1

- full character set, (G) *User*, B-2

ASCII "a" character set

- percent sign, (S) *Sys Mgr Essentials*, 9-17

ASCII characters

- delimiting in control block fields, (P) *RMS Ref*, A-5, A-6

ASCII character set

- See also DEC Multinational character set

- converting strings to binary, (P) *Sys Svc I*, SYS1-62

- converting strings to UTC, (P) *Sys Svc I*, SYS1-65

- EBCDIC translation from, (P) *LIB\$*, LIB-306, LIB-493

- EBCDIC translation to, (P) *LIB\$*, LIB-308, LIB-497

- formatting output string, (P) *Sys Svc I*, SYS1-272

- ASCII character set (cont'd)
 - string types, (P) *Debugger*, 8-16, 8-28
- ASCII pad character, (P) *Rec Mgmt Util*, 2-13
- ASCII space character
 - conversion function, (P) *Rec Mgmt Util*, 2-4
- ASCII time, (P) *Concepts*, 5-7
- asind routine, (P) *Portable Math*, DPML-6, B-2
- asinh routine, (P) *Portable Math*, DPML-7, B-2
- asin routine, (P) *Portable Math*, DPML-6, B-2
- ASN register
 - displaying, (P) *Alpha SDA*, SDA-87
- ASN symbol, (P) *Alpha SDA*, SDA-15
- Assemblers, (G) *SW Overview*, 4-5
 - MACRO-64, (G) *Compatibility*, 1-10
- Assembly languages
 - See MACRO, MACRO-64
- ASSIGN command, (G) *User*, 13-3; (G) *DCL A-M*, DCLI-40 to DCLI-45; (P) *Concepts*, 10-2
 - access modes, (G) *User*, 13-9
 - defining the LNK\$LIBRARY logical name, (P) *Linker*, LINK-40
 - /TRANSLATION_ATTRIBUTES qualifier, (P) *File Appl*, 5-7
- Assigning
 - a default form to a queue, (S) *Sys Mgr Essentials*, 13-63
 - a logical queue, (S) *Sys Mgr Essentials*, 13-56
 - characteristics to a queue, (S) *Sys Mgr Essentials*, 13-59
 - libraries to queues, (S) *Sys Mgr Essentials*, 13-66
 - logical queue to an execution queue, (G) *DCL A-M*, DCLI-47
 - queue name, (G) *DCL A-M*, DCLI-258
 - queue options, (G) *DCL A-M*, DCLI-258; (G) *DCL N-Z*, DCLII-366
 - reset modules to a queues, (S) *Sys Mgr Essentials*, 13-67
 - symbols interactively, (G) *DCL A-M*, DCLI-273
- Assigning an I/O channel, (P) *Sys Svc I*, SYS1-38
- Assigning a node to a group, (S) *DECamds*, 1-8
- Assignment statement
 - creating symbols, (G) *User*, 14-3
- = (Assignment statement) command, (G) *DCL A-M*, DCLI-1 to DCLI-4
- ASSIGN/MERGE command, (G) *DCL A-M*, DCLI-46; (S) *Sys Mgr Essentials*, 13-57
- ASSIGN/QUEUE command, (G) *DCL A-M*, DCLI-47, DCLI-48
- Assisted merge and volume shadowing, (S) *Sys Mgr Essentials*, 10-42
- /ASSIST qualifier
 - in Backup utility, (S) *Sys Mgmt Util A-L*, 7-15
 - in Mount utility, (S) *Sys Mgmt Util M-Z*, 2-8
- Associate access, (S) *Security*, 5-2
- AST
 - system services, (P) *Environment*, 10-7
- AST completion routines
 - arguments passed to, (P) *RMS Ref*, 2-4
- AST-driven programs
 - debugging, (P) *Debugger*, 13-16
- ASTEN register
 - displaying, (P) *Alpha SDA*, SDA-87
- Asterisk (*)
 - wildcard character, (S) *Sys Mgmt Util A-L*, 7-8
- Asterisk (*)
 - See also Percent sign (%)
- Asterisk (*)
 - as EDT prompt, (G) *User*, 9-3
 - as wildcard character, (S) *Sys Mgr Essentials*, 9-16
 - in directory specifications, (G) *User*, 4-9
 - in UIC format directory specifications, (G) *User*, 5-10
 - rules for using, (G) *User*, 4-9
 - in symbol definitions, (G) *User*, 14-4
 - multiplication operator, (P) *Debugger*, B-8
 - wildcard character
 - in START/QUEUE/MANAGER command, (S) *VMScluster Sys*, 7-3
- ASTLM process limit, (S) *Sys Mgr Essentials*, 6-41
 - effect of canceling wakeup on, (P) *Sys Svc I*, SYS1-82
 - value for efficient backups, (S) *Sys Mgr Essentials*, 10-10
- ASTLVL register
 - displaying, (P) *VAX SDA*, SDA-96
- AST progress check, (P) *LIB\$*, LIB-15
- /AST qualifier, (P) *Debugger*, 13-17
- AST queue process limit, (S) *Sys Mgr Essentials*, 6-41
- AST reentrant, (P) *SMG\$*, 4-1
- AST routines, (G) *Compatibility*, 1-9
 - global symbols, (P) *VAX SDA*, SDA-64
 - overview, (P) *Concepts*, 4-3
 - parameter list dependence, (G) *Compatibility*, 4-3
- ASTs (asynchronous system traps), (G) *SW Overview*, 4-11; (P) *Concepts*, 4-1, 6-22; (P) *Debugger*, 13-16; (P) *Alpha SDA*, SDA-15
- See also Synchronization
 - access mode, (P) *Concepts*, 4-5
 - argument lists, (P) *RMS Ref*, A-10
 - arguments passed to completion routines, (P) *RMS Ref*, A-10
 - argument values, (P) *RMS Ref*, A-10
 - blocking, (P) *Concepts*, 15-12, 15-18
 - CALL command, (P) *Debugger*, 13-17
 - condition handling at AST level, (P) *Modular Proc*, 3-21

ASTs (asynchronous system traps) (cont'd)

- Ctrl/C service routine, (P) *Debugger*, 5-11
 - declaring, (P) *Concepts*, 4-6; (P) *Sys Svc I*, SYS1-174
 - definition, (P) *Modular Proc*, 3-15
 - delivery, (P) *Concepts*, 4-5, 4-8
 - disabling, (P) *Sys Svc II*, SYS2-236
 - disabling interrupts, (P) *Modular Proc*, 3-19
 - enabling, (P) *Sys Svc II*, SYS2-236
 - example, (P) *Concepts*, 4-8
 - execution, (P) *Concepts*, 4-1
 - handler, (P) *Modular Proc*, 3-15, 3-16
 - I/O at AST-level, (P) *Modular Proc*, 3-20, A-4
 - in target process, (P) *Concepts*, 3-25
 - interrupt, (P) *Modular Proc*, 3-15
 - parameter, (P) *Concepts*, 4-7
 - process wait state, (P) *Concepts*, 4-5
 - quota, (P) *Concepts*, 9-3; (P) *I/O User*, 2-27, 3-10, 4-5, 5-44
 - reentrancy, (P) *Modular Proc*, 3-15, A-3
 - restrictions on use, (P) *DECthreads*, B-1
 - routine, (P) *Modular Proc*, 3-15
 - service routine, (P) *Concepts*, 4-6
 - setting for power recovery, (P) *Sys Svc II*, SYS2-252
 - setting timer for, (P) *Sys Svc II*, SYS2-249
 - specifying quota, (G) *DCL N-Z*, DCLII-58
 - system service, (P) *Concepts*, 4-1
 - system services, (P) *Environment*, 10-5
 - thread, (P) *Modular Proc*, 3-15
 - writing, (P) *Concepts*, 4-4
 - writing AST-reentrant procedures, (P) *Modular Proc*, 3-16
- ## ASTSR register
- displaying, (P) *Alpha SDA*, SDA-87
- ## AST symbols, (P) *Alpha SDA*, SDA-15
- ast_procedure data type, (P) *Interfaces*, B-2
- ## Asymmetric vector processing configuration, (S) *Sys Mgr Tuning*, 26-4
- ## ASYNCHRONOUS attribute, (P) *Rec Mgmt Util*, 4-6, 4-9, 4-17
- ## Asynchronous cancelability, (P) *DECthreads*, 2-15
- ## Asynchronous circuits, (S) *DECnet Mgmt*, 1-3
- See also Circuits
- ## Asynchronous connections, (S) *DECnet Intro*, 3-4
- configuration, (S) *DECnet Intro*, 3-19
 - correcting insufficient receive buffers, (S) *DECnet Mgmt*, 3-42
 - DDCMP, (S) *DECnet Intro*, 3-9; (S) *DECnet Mgmt*, 1-9
 - dynamic, (S) *DECnet Intro*, 1-12, 3-19, 3-29; (S) *DECnet Mgmt*, 1-3, 1-7, 1-9
 - dynamic DDCMP, (S) *DECnet Intro*, 3-19
 - dynamic line installation, (S) *DECnet Mgmt*, 2-14, 5-14
 - line installation, (S) *DECnet Mgmt*, 5-12
 - line parameters, (S) *DECnet Mgmt*, 3-45

Asynchronous connections (cont'd)

- static, (S) *DECnet Intro*, 1-12, 3-19, 3-23; (S) *DECnet Mgmt*, 1-3, 1-7, 1-9
 - static DDCMP, (S) *DECnet Intro*, 3-19
 - static line installation, (S) *DECnet Mgmt*, 2-13, 5-12
 - terminating dynamic, (S) *DECnet Intro*, 3-28
 - troubleshooting problems, (S) *DECnet Intro*, 4-15
- ## Asynchronous DDCMP
- driver, (S) *DECnet Intro*, 3-19, 3-25
- ## Asynchronous DECnet
- using virtual terminals, (S) *Sys Mgr Essentials*, 7-11, 7-12
- ## Asynchronous device
- LAT application ports for, (S) *Sys Mgmt Util A-L*, 13-10, 13-35
- ## Asynchronous events, (P) *SMG\$*, 4-1
- ## Asynchronous execution
- designing code for, (P) *DECthreads*, 3-1
- ## Asynchronous input/output, (P) *Concepts*, 9-20
- ## Asynchronous lines, (S) *DECnet Mgmt*, 1-3
- See also Lines
 - for point-to-point connections, (S) *DECnet Intro*, 3-4
- ## Asynchronous operations, (P) *File Appl*, 8-18, 8-19
- contrasted with synchronous operation, (P) *RMS Ref*, 2-8
 - performance, (P) *File Appl*, 9-8
 - using R0, (P) *RMS Ref*, 2-5
- ## Asynchronous programming techniques
- using in a multithreaded program, (P) *DECthreads*, A-7
- ## Asynchronous save blocks
- See ASBs
- ## Asynchronous SCSI data transfer mode
- enabling, (P) *I/O User*, 8-6, 8-12
- ## Asynchronous signals, (P) *DECthreads*, A-6
- ## Asynchronous software interrupts
- definition, (P) *Calling Std*, 1-4
- ## Asynchronous system services, (P) *Interfaces*, 4-5
- ## Asynchronous system trap progress check, (P) *LIB\$*, LIB-15
- ## Asynchronous system traps
- See ASTs
- ## Asynchronous system traps limit
- See ASTLM
- ## Asynchronous system traps limit (ASTLM), (S) *DECcmds*, 3-24
- ## Asynchronous user interface example, (P) *DECthreads*, 5-7
- ## ASY option, (P) *Rec Mgmt Util*, 4-9, 4-17
- ## atan2 routine, (P) *Portable Math*, DPML-9, B-2
- ## atand2 routine, (P) *Portable Math*, DPML-9, B-3

atan routine, (P) *Portable Math*, DPML-8, B-2
 atanh routine, (P) *Portable Math*, DPML-10, B-3
 atan routine, (P) *Portable Math*, DPML-8, B-2
 ATM communications service, (G) *V6.2 New Feat*, 8-5
 system management, (G) *V6.2 New Feat*, 8-12
 ATM intersite link specifications, (G) *V6.2 New Feat*, 8-10
 Atomic data types, (P) *Calling Std*, 4-1
 Atomic instructions
 effect on synchronization, (P) *Concepts*, 14-5
 Atomicity
 definition, (P) *Concepts*, 14-3
 Atomic memory reference, (P) *Concepts*, 14-3
 Atomic queue, (P) *DECthreads*, 2-18
 At sign
 See also Execute procedure (@) command
 At sign (@)
 as execute procedure command, (G) *User*, 15-21
 as shifting operator, (P) *Alpha SDA*, SDA-37
 contents-of operator, (P) *Debugger*, B-8
 execute-procedure command, (P) *Debugger*, 12-1
 using with a distribution list in Mail, (G) *User*, 6-7, 6-8
 ATTACH command, (G) *DCL A-M*, DCLI-49, DCLI-50; (P) *Debugger*, 5-11; (P) *Alpha SDA*, SDA-38; (P) *VAX SDA*, SDA-46
 in LATCP, (S) *Sys Mgmt Util A-L*, 13-6
 in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-13
 Attached processors, (S) *Sys Mgr Tuning*, 26-2
 Attacks, types of system, (S) *Security*, 10-1
 Attention AST, (P) *I/O User*, 5-76
 LAN drivers, (P) *I/O User*, 9-42
 mailbox, (P) *I/O User*, 4-12
 terminal, (P) *I/O User*, 5-44
 Attributes
 See also ACE attributes and Identifier attributes
 condition variable, (P) *DECthreads*, 2-7
 creation by the Edit/FDL utility, (P) *File Appl*, 4-3
 display, (P) *Debugger*, 11-3, 11-6, 11-9, 11-19
 Dynamic, (S) *Sys Mgmt Util A-L*, 5-21, 5-29, 5-37; (P) *Concepts*, 23-5
 guard size, (P) *DECthreads*, 2-7, pthread-6, pthread-11, cma-14, cma-20
 Holder Hidden, (S) *Sys Mgmt Util A-L*, 5-21, 5-29, 5-37; (P) *Concepts*, 23-5
 inherit scheduling, (P) *DECthreads*, 2-5
 mutex kind, (P) *DECthreads*, cma-16, cma-23
 mutex type, (P) *DECthreads*, 2-7
 Name Hidden, (S) *Sys Mgmt Util A-L*, 5-21, 5-29, 5-37; (P) *Concepts*, 23-5
 No access, (P) *Concepts*, 23-5
 No Access, (S) *Sys Mgmt Util A-L*, 5-21, 5-29, 5-37

Attributes (cont'd)

primary, (P) *File Appl*, 4-9
 priority, (P) *DECthreads*, pthread-8, pthread-14, cma-17, cma-24
 queue size, (P) *DECthreads*, cma1ib-5, cma1ib-6
 Resource, (S) *Sys Mgmt Util A-L*, 5-21, 5-29, 5-37; (P) *Concepts*, 23-5
 scheduling, (P) *DECthreads*, pthread-7, pthread-12, cma-15, cma-21
 scheduling policy, (P) *DECthreads*, 2-5, pthread-9, pthread-16, cma-18, cma-26
 scheduling priority, (P) *DECthreads*, 2-6
 specifying identifier characteristics, (S) *Sys Mgmt Util A-L*, 1-16
 stack size, (P) *DECthreads*, 2-7, pthread-10, pthread-18, cma-19, cma-28
 Subsystem, (S) *Sys Mgmt Util A-L*, 5-21, 5-29, 5-37; (P) *Concepts*, 23-5
 thread, (P) *DECthreads*, 2-4
 types of value, (P) *Rec Mgmt Util*, 4-2
 Attributes object
 creating, (P) *DECthreads*, 2-4, pthread-3, cma-11
 definition of, (P) *DECthreads*, 2-4
 deleting, (P) *DECthreads*, 2-4, cma-13
 /ATTRIBUTES qualifier, (P) *Linker*, LINK-48
 AUCBs (audio control blocks)
 defining, (P) *I/O User*, 2-20
 Audio
 error handling in applications, (P) *I/O User*, 2-23
 extensions to SCSI disk class driver, (P) *I/O User*, 2-18
 \$QIO interface to disk class driver, (P) *I/O User*, 2-19
 storing with data on CD-ROM, (P) *I/O User*, 2-24
 Audio applications
 programming, (P) *I/O User*, 2-25
 programming example, (P) *I/O User*, 2-25
 Audio control blocks
 See AUCBs
 Audit ACEs, (S) *Security*, 4-30; (S) *Sys Mgmt Util A-L*, 1-8
 how to use, (S) *Security*, 9-5
 specifying access, (S) *Sys Mgmt Util A-L*, 1-9
 specifying attributes, (S) *Sys Mgmt Util A-L*, 1-8
 Audit Analysis utility (ANALYZE/AUDIT), (G) *SW Overview*, 3-16; (S) *Security*, 9-1, 9-16 to 9-22; (S) *Sys Mgr Essentials*, 11-14; (S) *Sys Mgmt Util A-L*, 4-3 to 5-1
 exiting from, (S) *Sys Mgmt Util A-L*, 4-27
 generating security reports, (S) *Sys Mgr Tuning*, 18-29
 invoking, (S) *Sys Mgmt Util A-L*, 4-4

- Audit data packets
 - See Security audit data packets
- Audit event flags
 - See Security audit event flags
- Audit events
 - See Security-auditing events
- Audit header packets
 - See Security audit header packets
- Auditing
 - See also Security auditing
 - applications, (S) *Security*, 10-4
 - as security feature, (S) *Security*, 10-4
 - of security events, (S) *Security*, 9-1
 - security, (S) *Sys Mgr Essentials*, 11-2
- Auditing subsystem, (G) *SW Overview*, 3-14
- Audit log files
 - See Security audit log files
- Audit messages
 - See Security audit event messages
- AUDIT privilege, (S) *Security*, A-2
- Audit reports
 - See Security audit reports
- Audit server databases, (S) *Security*, 9-24; (S) *VMScluster Sys*, 5-13
- Audit server processes, (S) *Security*, 9-23 to 9-29
- Audit trails, (G) *SW Overview*, 3-15
 - See also Security auditing
 - protecting, (S) *Security*, C-8
 - role in security, (S) *Security*, 2-5
- Authentication
 - Kerberos, (S) *TCP/IP*, 5-2
- Authentication cards, (S) *Security*, 7-17
 - C2 system requirements, (S) *Security*, C-6
- Authentication of user identity, (S) *Sys Mgr Tuning*, 21-14
- Authorization databases, (S) *Security*, 2-4, 2-6
 - adding users, (S) *Security*, 7-4
 - auditing, (S) *Security*, 9-3
 - auditing modifications to, (S) *Security*, 9-7
 - contents, (S) *Security*, 2-2
 - synchronizing authorization on clustered systems, (S) *Security*, 11-4
- Authorization files, (S) *Sys Mgr Essentials*, 6-5
- Authorize utility (AUTHORIZE), (G) *SW Overview*, 3-9, 3-16; (S) *Sys Mgmt Util A-L*, 5-5; (S) *Alpha Perform*, 3-3; (S) *VMScluster Sys*, 1-11, B-1
 - ADD command, (S) *Sys Mgr Essentials*, 6-17
 - ADD/IDENTIFIER command, (S) *Sys Mgr Essentials*, 6-33
 - adding a user account, (S) *Sys Mgr Essentials*, 6-17
 - checking UAF quotas for software installation, (S) *Sys Mgr Essentials*, 3-7
 - commands and parameters, (S) *Comparison*, 2-5
- Authorize utility (AUTHORIZE) (cont'd)
 - commands summary (table), (S) *Sys Mgmt Util A-L*, 5-7
 - controlling access with identifiers, (S) *Sys Mgmt Util A-L*, 1-13
 - default password, (S) *Sys Mgmt Util A-L*, 5-8
 - DEFAULT record, (S) *Sys Mgmt Util A-L*, 5-8
 - exiting from, (S) *Sys Mgmt Util A-L*, 5-5
 - for network proxy database management, (S) *DECnet Intro*, 3-35
 - GRANT/IDENTIFIER command, (S) *Sys Mgr Essentials*, 6-33
 - invoking, (S) *Sys Mgmt Util A-L*, 5-5
 - limiting page file usage, (S) *Sys Mgr Tuning*, 15-9
 - listing user records, (S) *Sys Mgr Essentials*, 6-23
 - login flags, (S) *Sys Mgmt Util A-L*, 5-11
 - modifying a user account, (S) *Sys Mgr Essentials*, 6-23
 - modifying process limits for SYSTEM account, (S) *Sys Mgr Essentials*, 3-7
 - priorities
 - adjusting, (S) *Alpha Perform*, 19-1
 - privileges required, (S) *Sys Mgmt Util A-L*, 5-3
 - quotas
 - modifying, (S) *Alpha Perform*, 17-3
 - reducing process paging, (S) *Sys Mgr Tuning*, 26-7
 - restricting login hours with, (S) *Sys Mgr Tuning*, 16-4
 - restricting system use with, (S) *Sys Mgr Tuning*, 16-4
 - restrictions, (S) *Sys Mgmt Util A-L*, 5-3
 - setting process quotas for efficient backups, (S) *Sys Mgr Essentials*, 10-9
- Autoconfiguration
 - benefits, (S) *Sys Mgr Essentials*, 7-6
 - definition, (S) *Sys Mgr Essentials*, 5-8, 7-6
 - in system startup, (S) *Sys Mgr Essentials*, 5-4
 - suppressing, (S) *Sys Mgr Essentials*, 5-8, 7-8
 - of SCSI device, (P) *I/O User*, 8-8
 - on Alpha systems, (S) *Comparison*, A-1
 - VAXstation 2000 (table), (S) *Sys Mgmt Util M-Z*, D-7
 - VAXstation 2000 and MicroVAX 2000 devices, (S) *Sys Mgmt Util M-Z*, D-6
- AUTOCONFIGURE command
 - in SYSGEN, (S) *Sys Mgmt Util M-Z*, 5-5
 - in SYSGEN (VAX), (S) *Sys Mgr Essentials*, 7-6
 - in system startup, (S) *Sys Mgr Essentials*, 5-4, 5-7
 - suppressing, (S) *Sys Mgr Essentials*, 5-8, 7-8
- Autoconfiguring devices
 - on Alpha systems, (S) *Sys Mgmt Util M-Z*, 6-33

- Autodial protocol, (S) *Security*, 12-17; (S) *DECnet Intro*, 3-26
- Auto extends, (P) *File Appl*, 3-5 to 3-6
- Auto extend size selections, (P) *File Appl*, 3-5
- AUTOGEN.COM command procedure, (G) *SW Overview*, 3-7, 3-11; (G) *Compatibility*, 1-5; (S) *Sys Mgr Tuning*, 14-8; (S) *Sys Mgmt Util A-L*, 6-3; (S) *VMScluster Sys*, 1-10
- See also MODPARAMS.DAT file
- ADD_ prefix, (S) *Sys Mgr Tuning*, 14-19
- AGEN\$PARAMS.REPORT file, (S) *Sys Mgr Tuning*, 14-11
- as recommended method for changing system parameters, (S) *Sys Mgr Tuning*, 14-5
- automatic management of page, swap, and dump files, (S) *Sys Mgr Tuning*, 15-22
- calculation of page file size, (S) *Sys Mgr Tuning*, 15-4, 15-22, 15-23, 15-26
- calculation of parameter values, (S) *Sys Mgmt Util A-L*, 6-7
- calculation of swap file size, (S) *Sys Mgr Tuning*, 15-5, 15-22, 15-23, 15-26
- calculation of system dump file size, (S) *Sys Mgr Tuning*, 15-2, 15-22, 15-23, 15-26
- changing page, swap, and dump file sizes, (S) *Sys Mgr Tuning*, 15-22
- changing system parameters, (S) *Sys Mgr Tuning*, 14-3, 14-4; (S) *VAX Perform*, 5-1; (S) *Alpha Perform*, 16-2
- collection of data, (S) *Sys Mgmt Util A-L*, 6-6
- controlling operations performed by, (S) *Sys Mgr Tuning*, 14-10
- controlling system parameter values set by, (S) *Sys Mgr Tuning*, 14-18
- converting system parameter values for use with, (S) *Sys Mgr Tuning*, 14-5
- creating page, swap, and dump files, (S) *Sys Mgr Tuning*, 15-17, 15-24
- defining the number of VAXcluster nodes for, (S) *Sys Mgr Tuning*, 14-21
- displaying page, swap, and dump file size calculations, (S) *Sys Mgr Tuning*, 15-17, 15-22
- display of page, swap, and dump file size calculations, (S) *Sys Mgmt Util A-L*, 6-7
- enabling or disabling disk server, (S) *VMScluster Sys*, 8-21
- end phase
 - default, (S) *Sys Mgmt Util A-L*, 6-10
 - specifying when invoking, (S) *Sys Mgr Tuning*, 14-9; (S) *Sys Mgmt Util A-L*, 6-10
- examining calculations of, (S) *Sys Mgmt Util A-L*, 6-4
- executed by CLUSTER_CONFIG.COM procedure, (S) *VMScluster Sys*, 8-1
- executing
 - in batch, (S) *Sys Mgr Tuning*, 14-22
- AUTOGEN.COM command procedure
 - executing (cont'd)
 - interactively, (S) *Sys Mgr Tuning*, 14-18
 - execution mode
 - specifying when invoking, (S) *Sys Mgr Tuning*, 14-9; (S) *Sys Mgmt Util A-L*, 6-10
 - failure executing SYCONFIG.COM, (S) *Sys Mgr Essentials*, 7-9
 - feedback, (S) *Sys Mgmt Util A-L*, 6-3, 6-4
 - collection of, (S) *Sys Mgmt Util A-L*, 6-5
 - data file, (S) *Sys Mgmt Util A-L*, 6-5
 - parameters affected by, (S) *Sys Mgmt Util A-L*, 6-5
 - files used by, (S) *Sys Mgmt Util A-L*, 6-9
 - functions of, (S) *Sys Mgr Tuning*, 14-9
 - generation of known image file list (VMSIMAGES.DAT), (S) *Sys Mgmt Util A-L*, 6-7
 - GENFILES phase, (S) *Sys Mgmt Util A-L*, 6-7
 - GENPARAMS phase, (S) *Sys Mgmt Util A-L*, 6-7
 - GETDATA phase, (S) *Sys Mgmt Util A-L*, 6-6
 - HELP phase, (S) *Sys Mgmt Util A-L*, 6-8
 - input files, (S) *Sys Mgmt Util A-L*, 6-9
 - installing page, swap, and dump files, (S) *Sys Mgr Tuning*, 15-18, 15-22
 - instructions for using, (S) *Sys Mgr Tuning*, 14-18
 - invoking, (S) *Sys Mgr Tuning*, 14-9; (S) *Sys Mgmt Util A-L*, 6-10
 - operations performed by, (S) *Sys Mgmt Util A-L*, 6-5
 - output files, (S) *Sys Mgmt Util A-L*, 6-9
 - parameters to, (S) *Sys Mgr Tuning*, 14-9; (S) *Sys Mgmt Util A-L*, 6-10
 - performance tuning, (S) *Sys Mgr Tuning*, 16-5
 - phases, (S) *Sys Mgmt Util A-L*, 6-5
 - order of, (S) *Sys Mgr Tuning*, 14-16
 - specifying when invoking, (S) *Sys Mgr Tuning*, 14-9; (S) *Sys Mgmt Util A-L*, 6-10
 - REBOOT phase, (S) *Sys Mgmt Util A-L*, 6-8
 - recommendation
 - for using to size page, swap, and dump files, (S) *Sys Mgr Tuning*, 15-22
 - restrictions
 - for changing file sizes, (S) *Sys Mgr Tuning*, 15-23
 - for specifying page and swap file sizes, (S) *Sys Mgr Tuning*, 15-23
 - restriction with changing system files sizes, (S) *Sys Mgmt Util A-L*, 6-7
 - reviewing calculations of, (S) *Sys Mgr Tuning*, 14-10, 14-18
 - running, (S) *Comparison*, 2-26
 - running with feedback option, (S) *VMScluster Sys*, 8-42, 8-43

AUTOGEN.COM command procedure (cont'd)

- SAVPARAMS phase, (S) *Sys Mgmt Util A-L*, 6-6
 - SETPARAMS.DAT file, (S) *Sys Mgr Tuning*, 14-18
 - SETPARAMS phase, (S) *Sys Mgmt Util A-L*, 6-7
 - SHUTDOWN phase, (S) *Sys Mgmt Util A-L*, 6-8
 - specifying an alternate default startup command procedure, (S) *Sys Mgr Essentials*, 4-13
 - specifying dump file, (S) *VMScluster Sys*, 10-13
 - specifying location of page and swap files, (S) *Sys Mgr Tuning*, 15-24
 - specifying number of Ethernet adapters in, (S) *Sys Mgr Tuning*, 14-21
 - specifying size of page and swap files
 - of individual files, (S) *Sys Mgr Tuning*, 15-22, 15-24
 - of total file space, (S) *Sys Mgr Tuning*, 15-22, 15-23
 - specifying values for parameters not calculated by, (S) *Sys Mgr Tuning*, 14-20
 - start phase
 - default, (S) *Sys Mgmt Util A-L*, 6-10
 - specifying when invoking, (S) *Sys Mgr Tuning*, 14-9; (S) *Sys Mgmt Util A-L*, 6-10
 - system parameters affected by, (S) *Sys Mgr Tuning*, 14-10; (S) *Sys Mgmt Util A-L*, 6-4
 - system parameters affected by feedback, (S) *Sys Mgmt Util A-L*, 6-5
 - TESTFILES phase, (S) *Sys Mgmt Util A-L*, 6-7
 - timing of file size calculations, (S) *Sys Mgr Tuning*, 15-23
 - types of data collected by, (S) *Sys Mgr Tuning*, 14-9
 - using with MODPARAMS.DAT, (S) *VMScluster Sys*, 6-9
 - when to run, (S) *Sys Mgr Tuning*, 14-8; (S) *Sys Mgmt Util A-L*, 6-3
- AUTOGEN.PAR, (S) *Sys Mgmt Util A-L*, 6-6, 6-7
- AUTOGEN command procedure, (S) *Alpha Perform*, 3-3
- AGEN\$NO_AUTOCONFIGURE logical, (G) *V6.2 New Feat*, 3-14
 - AGEN\$NO_SPAWN logical, (G) *V6.2 New Feat*, 3-14
 - AGEN\$REPORT_NO_INFORMATIONALS logical, (G) *V6.2 New Feat*, 3-14
 - computation of SYSMWCNT parameter, (G) *V6.2 New Feat*, 3-14
 - feedback mode, (S) *Alpha Perform*, 3-3, 7-1
 - feedback report, (S) *Alpha Perform*, 9-5
 - LOAD_DECNET_IMAGES pseudoparameter, (G) *V6.2 New Feat*, 3-15

AUTOGEN command procedure (cont'd)

- preventing autoconfigure, (G) *V6.2 New Feat*, 3-14
 - preventing from running as a spawned subprocess, (G) *V6.2 New Feat*, 3-14
 - suppression of informational messages, (G) *V6.2 New Feat*, 3-14
 - swapper trimming, (S) *Alpha Perform*, 6-13
 - AUTOGEN feedback, (S) *Sys Mgr Tuning*, 14-8 to 14-22
 - saving during system shutdown, (S) *Sys Mgr Essentials*, 4-29
- AUTOGEN utility, (S) *DECnet Mgmt*, 5-31
- Automatic
- data collection, (S) *DECamds*, 5-2, Glossary-1
 - event collection, (S) *DECamds*, Glossary-1
 - event investigation, (S) *DECamds*, 5-2
 - fix, (S) *DECamds*, 4-6
 - investigation for events, (S) *DECamds*, 5-3
 - investigation for locks, (S) *DECamds*, 5-3
- Automatic configurations
- of DECnet for OpenVMS network, (S) *DECnet Intro*, 3-11
 - of DECnet network, (S) *DECnet Intro*, 3-10
 - of DECnet node, (S) *Sys Mgr Tuning*, 21-12
 - of devices, (S) *Sys Mgr Essentials*, 7-6
- Automatic disconnection
- of network link, (S) *DECnet Intro*, 3-3
- Automatic login facility (ALF), (S) *Security*, 7-25
- adding records, (S) *Sys Mgmt Util M-Z*, 6-10
 - Autologin account as security problem, (S) *Security*, 7-11
 - AUTOLOGIN flag, (S) *Security*, 7-11
 - C2 systems and, (S) *Security*, C-7
 - cluster requirements for ALF files, (S) *Security*, 11-4
 - displaying records, (S) *Sys Mgmt Util M-Z*, 6-13
 - removing records, (S) *Sys Mgmt Util M-Z*, 6-11
 - setting up an automatic login account, (S) *Sys Mgr Essentials*, 6-32
- /AUTOMATIC qualifier
- in Mount utility, (S) *Sys Mgmt Util M-Z*, 2-9
- Automatic start
- of queue manager, (S) *Sys Mgr Essentials*, 12-3, 12-7, 12-9
- Automatic switching
- of terminal line, (S) *DECnet Intro*, 3-27
- Automatic unshelving
- controlling, (G) *DCL N-Z*, DCLII-185; (P) *Sys Svc II*, SYS2-269
 - determining, (G) *DCL A-M*, DCLI-341; (G) *DCL N-Z*, DCLII-314; (P) *Sys Svc I*, SYS1-360
- Automatic volume switching, (S) *Sys Mgr Essentials*, 8-39

Automatic working set adjustment

See AWSA

AUTO prefix, (S) *DECnet Mgmt Util*, C-1

Autostart feature

description, (S) *Sys Mgr Essentials*, 13-4

disabling, (S) *Sys Mgr Essentials*, 12-9, 13-54
before shutting down a node, (S) *Sys Mgr Essentials*, 13-55

enabling, (S) *Sys Mgr Essentials*, 13-4, 13-18, 13-48

on LAT queues, (S) *Sys Mgr Essentials*, 13-4, 13-10

recommended use, (S) *Sys Mgr Essentials*, 13-10

with LAT queues, (S) *Sys Mgr Essentials*, 13-4, 13-10

Autostart queues, (G) *DCL A-M*, DCLI-261; (G) *DCL N-Z*, DCLII-366 to DCLII-367

activating, (G) *DCL A-M*, DCLI-202, DCLI-261; (S) *Sys Mgr Essentials*, 13-4, 13-15, 13-16, 13-49

activating inactive queue status, (S) *Sys Mgr Essentials*, 13-51

creating, (G) *DCL A-M*, DCLI-261; (S) *Sys Mgr Essentials*, 13-15, 13-16

deactivating, (G) *DCL N-Z*, DCLII-394, DCLII-398

designating, (G) *DCL A-M*, DCLI-260

disabling, (G) *DCL A-M*, DCLI-174; (G) *DCL N-Z*, DCLII-400

enabling on a node, (G) *DCL A-M*, DCLI-202
failover, (G) *DCL A-M*, DCLI-174, DCLI-202; (S) *Dependable*, 9-18

preparing for a shutdown, (G) *DCL N-Z*, DCLII-401

preventing failover, (G) *DCL A-M*, DCLI-174
preventing from starting, (S) *Sys Mgr Essentials*, 13-54

recommended use, (S) *Sys Mgr Essentials*, 13-10

relationship between activating and starting, (S) *Sys Mgr Essentials*, 13-4

restarting after deactivating, (G) *DCL N-Z*, DCLII-394, DCLII-398

starting, (G) *DCL A-M*, DCLI-261; (S) *Sys Mgr Essentials*, 13-48

in startup command procedure, (S) *Sys Mgr Essentials*, 13-18

stopping before shutdown, (G) *DCL A-M*, DCLI-174

troubleshooting, (S) *Sys Mgr Essentials*, 13-81
with LAT printers, (S) *Sys Mgr Essentials*, 13-4, 13-10

AUTO_POSITIONING command

SHOW CLUSTER, (S) *Sys Mgr Tuning*, 20-12

Availability, (G) *SW Overview*, 7-2

Refer also to the *Guidelines for VMScluster Configurations*

achieved by shadow set configurations, (S) *Dependable*, 8-19

after LAN component failures, (S) *VMScluster Sys*, 3-17, D-3

as a function of dependable computing, (S) *Dependable*, 8-58

booting from multiple LAN adapters, (S) *VMScluster Sys*, 9-7

CI, (S) *VMScluster Sys*, 3-2

data center, (S) *VMScluster Sys*, 3-12

DSSI, (S) *VMScluster Sys*, 3-4

levels, (S) *Dependable*, 8-20f

of data, (S) *VMScluster Sys*, 2-5, 6-22

of network, (S) *VMScluster Sys*, D-3

of queue manager, (S) *Sys Mgr Essentials*, 12-9, 12-17; (S) *VMScluster Sys*, 7-3

of queues, (S) *Sys Mgr Essentials*, 13-4, 13-15

recovery from failures, (S) *Dependable*, 8-21

software tools, (G) *SW Overview*, 2-12

through selection of MOP servers, (S) *VMScluster Sys*, 3-17

Availability manager

See *DECamds*

Availability messages

setting broadcast intervals, (S) *DECamds*, 1-10

Availability of devices

OPCOM message, (S) *Sys Mgr Essentials*, 8-59

Availability of products

base operating system features, (G) *Compatibility*, 3-1

Digital optional software products, (G) *Compatibility*, 3-3

third-party applications, (G) *Compatibility*, 3-3

Availability of queues, (G) *DCL A-M*, DCLI-261; (G) *DCL N-Z*, DCLII-367

Available queue status, (S) *Sys Mgr Essentials*, 13-51

Available sets, (S) *Sys Mgr Tuning*, 26-2

AVAIL command, (S) *DECamds*, 2-1

Avoiding user errors

to support dependable computing, (S) *Dependable*, 3-12

AWSA (automatic working set adjustment), (S) *Alpha Perform*, 6-3

AUTOGEN, (S) *Alpha Perform*, 17-6

enabling, (S) *Alpha Perform*, 17-6

investigating status, (S) *Alpha Perform*, 13-6

page faulting, (S) *Alpha Perform*, 6-3

parameters, (S) *Alpha Perform*, 6-4

adjusting, (S) *Alpha Perform*, 6-10

swapper trimming, (S) *Alpha Perform*, 6-13

tuning, (S) *Alpha Perform*, 6-10

AWSA (automatic working set adjustment) (cont'd)
 tuning to respond to increased demand, (S)
Alpha Perform, 17-5
 voluntary decrementing, (S) *Alpha Perform*,
 6-9, 6-13

B

Backbone networks, (S) *TCP/IP*, 1-6
 Background scheduling, (P) *DECthreads*, 2-5
 Backing store
 paging files, (S) *Alpha Perform*, 11-7
 section files, (S) *Alpha Perform*, 11-7
 Backing up the system disk, (S) *Sys Mgr
 Essentials*, 5-49
 after installation, (S) *Sys Mgr Essentials*, 3-13
 Backlinks
 definition, (S) *Sys Mgr Essentials*, 8-56; (S)
 Sys Mgmt Util A-L, 3-3
 Backslash (\)
 current value, (P) *Debugger*, 8-5
 global-symbol specifier, (P) *Debugger*, 9-10,
 B-8
 path name delimiter, (P) *Debugger*, 9-8, 10-4,
 B-8
 Backspace key, (G) *User*, 3-17, 3-19
 Backup
 compare operation for, (S) *Sys Mgmt Util A-L*,
 7-23
 list operation, (S) *Sys Mgmt Util A-L*, 7-18,
 7-32, 7-44
 selective, (S) *Sys Mgmt Util A-L*, 7-16, 7-17,
 7-30, 7-31, 7-47
 BACKUP.SYS file
 See Backup log file
 BACKUP.SYS log file, (P) *File Appl*, 1-8
 BACKUP attribute, (P) *Rec Mgmt Util*, 4-15
 BACKUP command, (G) *DCL A-M, DCLI-51*; (S)
 Sys Mgmt Util A-L, 7-5 to 7-69
 and save sets, (S) *Sys Mgr Essentials*, 10-23
 /EXACT_ORDER qualifier, (S) *Sys Mgr
 Essentials*, 10-22
 for backing up directories, (S) *Sys Mgr
 Essentials*, 10-24
 for copying directories, (S) *Sys Mgr Essentials*,
 10-23
 for copying files, (S) *Sys Mgr Essentials*, 10-23
 for image backups, (S) *Sys Mgr Essentials*,
 10-31, 10-32
 for incremental backups, (S) *Sys Mgr
 Essentials*, 10-34, 10-35
 format, (S) *Sys Mgr Essentials*, 10-4
 /GROUP_SIZE qualifier, (S) *Sys Mgr
 Essentials*, 10-62
 /IGNORE=LABEL_PROCESSING qualifier, (S)
 Sys Mgr Essentials, 10-22, 10-65
 /IGNORE qualifier, (S) *Sys Mgr Essentials*,
 10-30, 10-63

BACKUP command (cont'd)
 /IMAGE qualifier, (S) *Sys Mgr Essentials*,
 10-31, 10-32, 10-55
 /INITIALIZE qualifier, (S) *Sys Mgr Essentials*,
 10-14
 in network operations, (S) *DECnet Intro*, 2-9
 in VMSINSTAL.COM command procedure, (S)
 Sys Mgr Essentials, 3-13
 /JOURNAL qualifier, (S) *Sys Mgr Essentials*,
 10-26
 /LABEL qualifier, (S) *Sys Mgr Essentials*,
 10-13, 10-23, 10-34
 /LOG qualifier, (S) *Sys Mgr Essentials*, 10-63
 /[NO]ALIAS qualifier, (G) *V6.2 New Feat*, 3-16
 /PHYSICAL qualifier, (S) *Sys Mgr Essentials*,
 10-55
 qualifiers, (S) *Sys Mgr Essentials*, 10-5
 /RECORD qualifier, (S) *Sys Mgr Essentials*,
 10-31, 10-32, 10-34, 10-35
 /REWIND qualifier, (S) *Sys Mgr Essentials*,
 10-13, 10-34
 /SAVE_SET qualifier, (S) *Sys Mgr Essentials*,
 10-32, 10-35
 /SINCE qualifier, (S) *Sys Mgr Essentials*,
 10-34, 10-35
 /VERIFY qualifier, (S) *Sys Mgr Essentials*,
 10-63
 with multiple output devices, (S) *Sys Mgr
 Essentials*, 10-24, 10-32, 10-33
 Backup log file, (P) *File Appl*, 1-8
 BACKUP.SYS, (S) *Sys Mgr Tuning*, A-9
 reserved file, (S) *Sys Mgr Tuning*, A-9
 Backup Manager, (S) *Sys Mgr Essentials*, 10-5
 description, (G) *V6.2 New Feat*, 3-15
 features, (S) *Sys Mgr Essentials*, 10-5
 getting started, (S) *Sys Mgr Essentials*, 10-6
 types of help available, (S) *Sys Mgr Essentials*,
 10-5
 BACKUP media
 Files-11 disk save set, (S) *Sys Mgr Essentials*,
 10-7
 magnetic tape save set, (S) *Sys Mgr Essentials*,
 10-6
 network save set, (S) *Sys Mgr Essentials*, 10-7
 sequential-disk save set, (S) *Sys Mgr
 Essentials*, 10-7
 Backup operations, (G) *Compatibility*, 1-5; (P)
 File Appl, 1-32
 /BACKUP qualifier
 in Backup utility, (S) *Sys Mgmt Util A-L*, 7-16
 Backups
 See also Image backup, Incremental backup,
 and Standalone backup
 archiving data, (S) *Dependable*, 9-16
 DEC Rdb, online, (S) *Dependable*, 8-40
 general recommendations, (S) *Security*, 8-29
 improving the speed of, (S) *Sys Mgmt Util A-L*,
 7-31

Backups (cont'd)

- of Alpha data on Alpha computers, (S) *Comparison*, 2-4
 - of PC disks, (G) *SW Overview*, 6-23
 - on Alpha and VAX systems, (S) *Comparison*, 3-2
 - on Alpha systems, (G) *SW Overview*, 3-10
 - on VAX systems, (G) *SW Overview*, 3-10
 - performed from captive privileged account, (S) *Security*, 7-7
 - performing in command procedures, (S) *Sys Mgr Essentials*, 8-46
 - procedures, (S) *Dependable*, 9-14
 - using SLS, (G) *SW Overview*, 7-8
- Backup utility (BACKUP), (G) *SW Overview*, 3-10; (S) *VMScluster Sys*, 1-11; (P) *File Appl*, 10-2
- backing up active disks, (S) *Sys Mgr Essentials*, 10-63
 - backing up shadow sets, (S) *Sys Mgr Essentials*, 10-40
- Backup Manager, (S) *Sys Mgr Essentials*, 10-4
- command format, (S) *Sys Mgr Essentials*, 10-4
 - command line qualifiers, (S) *Sys Mgmt Util A-L*, 7-7
 - command line syntax, (S) *Sys Mgmt Util A-L*, 7-5
 - command procedures, (S) *Sys Mgr Essentials*, 10-36
 - command qualifiers, (S) *Sys Mgr Essentials*, 10-5
 - copying dump file, (S) *Sys Mgr Tuning*, 15-4, 15-14
 - copying system dump file, (P) *Alpha SDA*, SDA-5; (P) *VAX SDA*, SDA-7
 - copying the queue database, (S) *Sys Mgr Essentials*, 12-12
 - data integrity mechanisms, (S) *Sys Mgr Essentials*, 10-62
 - /DELETE qualifier, (S) *Sys Mgmt Util A-L*, 7-26
 - directing output from, (S) *Sys Mgmt Util A-L*, 7-11
 - eliminating extents, (P) *File Appl*, 9-8
 - exiting from, (S) *Sys Mgmt Util A-L*, 7-11
 - interfaces to it, (S) *Sys Mgr Essentials*, 10-4
 - invoking, (S) *Sys Mgmt Util A-L*, 7-11
 - making archive copies, (P) *File Appl*, 10-29
 - open files during a backup, (S) *Sys Mgr Essentials*, 10-30, 10-63
 - restoring contiguity on fragmented disks, (S) *VAX Perform*, 3-36; (S) *Alpha Perform*, 11-8
 - restoring shadow sets, (S) *Sys Mgr Essentials*, 10-47
 - save set, (S) *Sys Mgr Essentials*, 10-23
 - stores save-set file in MFD, (S) *Sys Mgr Tuning*, A-8

Backup utility (BACKUP) (cont'd)

- transferring information, (S) *Sys Mgr Essentials*, 9-19
 - use by VMSINSTAL.COM command procedure, (S) *Sys Mgr Essentials*, 3-13
 - using on workstations, (S) *Sys Mgr Essentials*, 10-36
 - using to back up directories, (S) *Sys Mgr Essentials*, 10-24
 - using to compare files, (S) *Sys Mgmt Util A-L*, 7-23
 - using to copy directories, (S) *Sys Mgr Essentials*, 10-23
 - using to copy files, (S) *Sys Mgr Essentials*, 10-23
- BACKUSER.COM command procedure, (S) *Sys Mgr Essentials*, 10-36
- Backward indexing, (P) *MTH\$*, 2-6
- BAD (Bad Block Locator utility)
- See Bad Block Locator utility
- BADBLK.SYS file
- See Bad block file
- Bad block data
- on disks, (G) *DCL A-M*, DCLI-256
- Bad block file, (P) *File Appl*, 1-7
- BADBLK.SYS, (S) *Sys Mgr Tuning*, A-8
- definition, (S) *Sys Mgr Tuning*, A-8
 - reserved file, (S) *Sys Mgr Tuning*, A-8
- Bad Block Locator utility (BAD)
- Refer also to the *OpenVMS Bad Block Locator Utility Manual*
 - analyzing media for bad blocks, (S) *Sys Mgr Essentials*, 8-65
 - detecting media errors, (S) *Sys Mgr Essentials*, 8-64
 - invoking with ANALYZE/MEDIA, (S) *Sys Mgr Essentials*, 8-65
- BADLOG.SYS file
- See Pending bad block log file
- Bad page list
- displaying, (P) *VAX SDA*, SDA-131
- /BAD qualifier, (P) *VAX SDA*, SDA-131
- Balance as a function of dependability, (S) *Dependable*, 1-17
- Balance set
- definition, (S) *Alpha Perform*, 5-1
- Balance sets
- swapping, (P) *Concepts*, 19-12, 20-12
- Balance slots, (S) *Alpha Perform*, 13-9
- real, (S) *VAX Perform*, 2-18
 - virtual, (S) *VAX Perform*, 2-18
 - disabling, (S) *VAX Perform*, 2-18
 - enabling, (S) *VAX Perform*, 2-18
- BALSETCNT system parameter, (S) *Alpha Perform*, 17-7
- adjusting, (S) *VAX Perform*, 5-8; (S) *Alpha Perform*, 13-3

BALSETCNT system parameter (cont'd)

- artificially induced swapping, (S) *VAX Perform*, 3-25; (S) *Alpha Perform*, 10-6
- increasing, (S) *VAX Perform*, 5-8
- reducing, (S) *VAX Perform*, 5-8

Banner pages

- commands used with, (S) *Sys Mgr Essentials*, 13-60
- definition, (S) *Sys Mgr Essentials*, 13-33
- file, (S) *Sys Mgr Essentials*, 13-42, 13-60
- job, (S) *Sys Mgr Essentials*, 13-42, 13-60

Barrier synchronization

- See also Parallel processing

BASE= option, (P) *Linker*, LINK-43

Base addresses

- defaults for images, (P) *Linker*, LINK-43
- specifying using the CLUSTER= option, (P) *Linker*, LINK-47
- system image, (P) *Linker*, LINK-38

Based images

- creation of, (P) *Linker*, LINK-43
- memory allocation for, (P) *Linker*, LINK-43
- processing of, (P) *Linker*, 3-9

Based shareable images

- creating, (P) *Linker*, 4-7

BASEENVIRON phase of system startup, (S) *Sys Mgr Essentials*, 5-4, 5-18

Base priority

- See also Priority, base
- establishing for batch jobs, (G) *DCL A-M*, DCLI-261; (G) *DCL N-Z*, DCLII-196
- of circuit, (S) *DECnet Mgmt*, 3-32

Base register architecture, (P) *Calling Std*, 3-39

BASIC, (G) *Compatibility*, 1-10; (P)

Environment, 7-2, 7-4

- data type declarations, (P) *Interfaces*, B-21
- DEC BASIC, (G) *SW Overview*, 4-5
- file array descriptors, (P) *Calling Std*, 5-23
- implementation table, (P) *Interfaces*, B-21
- USEROPEN routine, (P) *File Appl*, 5-10, 9-5
- VAX BASIC, (G) *SW Overview*, 4-5

Basic concepts of dependability, (S) *Dependable*, 1-8

BATCH\$RESTART symbol

- using in command procedures, (G) *User*, 15-25

BATCH.COM command procedure, (G) *User*, C-27

- sample execution, (G) *User*, C-31

Batch and print queuing system, (S) *Sys Mgr Essentials*, 12-2

- See also Queue configurations
- comparison of Alpha and VAX capabilities, (S) *Comparison*, 3-4
- components, (S) *Sys Mgr Essentials*, 12-1
- in VMScluster environments
 - with multiple system disk, (S) *Sys Mgr Essentials*, 12-6
- queue database

Batch and print queuing system queue database (cont'd)

- location of files, (S) *Sys Mgr Essentials*, 12-5
- mounting disk for, (S) *Sys Mgr Essentials*, 12-6

- queuing process, (S) *Sys Mgr Essentials*, 13-2
- sample configurations, (S) *Sys Mgr Essentials*, 13-4 to 13-14

- starting in system startup, (S) *Sys Mgr Essentials*, 5-12

- steps for setting up, (S) *Sys Mgr Essentials*, 13-14

Batch and print recovery techniques, (S) *Dependable*, 9-18 to 9-19

Batch execution queues

- See also Execution queues
- description, (S) *Sys Mgr Essentials*, 13-3

Batch executions on remote nodes, (S) *Sys Mgmt Util M-Z*, 6-6; (S) *DECnet Intro*, 2-12, 2-13

Batch identifiers, (S) *Security*, 4-3; (S) *Sys Mgr Essentials*, 11-11

Batch jobs

- See also Job status

- accessing devices, (S) *Sys Mgr Essentials*, 8-46
- affected by shift restrictions, (G) *User*, 2-12; (S) *Security*, 3-8

- allowing to complete before stopping a queue, (S) *Sys Mgr Essentials*, 13-55

- authorization, (G) *User*, 2-10; (S) *Security*, 3-7

- changing characteristics, (G) *User*, 18-16

- changing entries, (G) *User*, 18-16

- changing scheduling priority, (S) *Sys Mgr Essentials*, 13-72

- completing before using VMSINSTAL.COM command procedure, (S) *Sys Mgr Essentials*, 3-7

- controlling, (S) *Sys Mgr Essentials*, 13-68

- defining default working sets, (G) *DCL A-M*, DCLI-280

- defining maximum CPU time limit, (G) *DCL A-M*, DCLI-278

- defining working set extent, (G) *DCL A-M*, DCLI-280

- defining working set quotas, (G) *DCL N-Z*, DCLII-202

- definition, (G) *User*, 11-9

- deleting, (G) *User*, 18-18, 18-19; (S) *Sys Mgr Essentials*, 13-74

- deleting files

- after processing, (G) *DCL N-Z*, DCLII-407

- deleting log files, (G) *DCL A-M*, DCLI-278; (G) *DCL N-Z*, DCLII-408

- displaying status, (G) *User*, 18-18

- distributing system work load, (S) *Sys Mgr Tuning*, 16-4

- end of job on cards, (G) *DCL A-M*, DCLI-208

Batch jobs (cont'd)

- establishing values for, (S) *VAX Perform*, 5-5;
(S) *Alpha Perform*, 17-4
- executing, (S) *Sys Mgr Essentials*, 13-3
- flushing output buffers, (G) *DCL N-Z*,
DCLII-176
- holding, (G) *DCL A-M*, DCLI-278; (G) *DCL*
N-Z, DCLII-408
- holding and releasing, (S) *Sys Mgr Essentials*,
13-71
- job card, (S) *Sys Mgr Essentials*, 7-17
- job entries, (G) *User*, 18-10
- keeping log files, (G) *DCL N-Z*, DCLII-408
- limiting CPU time of, (G) *DCL A-M*, DCLI-278;
(G) *DCL N-Z*, DCLII-408
- log files, (G) *User*, 18-14; (G) *DCL N-Z*,
DCLII-404
- modifying, (S) *Sys Mgr Essentials*, 13-70
- monitoring, (S) *Sys Mgr Essentials*, 13-68
- on remote network node, (G) *DCL N-Z*,
DCLII-410
- output, (G) *User*, 18-14
- passing parameters to, (G) *DCL N-Z*,
DCLII-409
- password, (G) *DCL N-Z*, DCLII-10
- password protection and cardreaders, (S)
Security, 3-13
- priority, (G) *DCL N-Z*, DCLII-410
- providing input to, (G) *User*, 18-13
- requesting
 - executing, (S) *Sys Mgr Essentials*, 13-73
 - pending, (S) *Sys Mgr Essentials*, 13-73
- restarting, (G) *User*, 18-19
- retaining in a queue, (S) *Sys Mgr Essentials*,
13-74
- saving log file, (G) *DCL A-M*, DCLI-278
- scheduling, (S) *Sys Mgr Essentials*, 13-72
- specifying multiple command procedures, (G)
User, 18-12
- specifying start time, (G) *User*, 18-11
- stopping, (G) *User*, 18-18
- stopping process, (G) *DCL N-Z*, DCLII-383
- SUBMIT command
 - qualifiers, (G) *User*, 18-17
- submitting, (G) *User*, 18-10
 - command procedures, (G) *User*, 15-24,
18-10
- submitting at startup, (S) *Sys Mgr Essentials*,
5-14
- submitting through cards, (G) *DCL A-M*,
DCLI-277
- synchronizing multiple procedures, (G) *User*,
18-19, 18-20, 18-21
- synchronizing with process, (G) *DCL N-Z*,
DCLII-416
- uses of, (G) *User*, 18-10
- working set

Batch jobs

working set (cont'd)

- defining default, (G) *DCL A-M*, DCLI-270,
DCLI-280; (G) *DCL N-Z*, DCLII-201,
DCLII-375, DCLII-412
- defining extent for, (G) *DCL A-M*,
DCLI-270, DCLI-280; (G) *DCL N-Z*,
DCLII-201, DCLII-375, DCLII-413
- defining quotas for, (G) *DCL A-M*,
DCLI-280; (G) *DCL N-Z*, DCLII-202,
DCLII-375, DCLII-413
- Batch logins, (S) *Security*, 3-7
- Batch mode, (G) *SW Overview*, 1-3
 - as execution mode for a startup procedure, (S)
Sys Mgr Essentials, 5-19
- Batch operations, (G) *SW Overview*, 3-11
- Batch-oriented editor, (G) *DCL A-M*, DCLI-197
- Batch processing
 - working set limits, (S) *Alpha Perform*, 6-2
- Batch processing environment
 - generic queues in a VMScluster, (S) *Sys Mgr*
Essentials, 13-7
 - on a standalone workstation, (S) *Sys Mgr*
Essentials, 13-5
 - sample configurations, (S) *Sys Mgr Essentials*,
13-4 to 13-7
 - steps for setting up, (S) *Sys Mgr Essentials*,
13-14
 - with specialized queues, (S) *Sys Mgr*
Essentials, 13-6
- Batch queues, (S) *VMScluster Sys*, 7-10
 - See also Queue managers
 - allowing jobs to complete before stopping, (S)
Sys Mgr Essentials, 13-55
 - assigning unique name to, (S) *VMScluster Sys*,
7-11
 - changing job entries, (G) *DCL N-Z*, DCLII-133
 - clusterwide generic, (S) *VMScluster Sys*, 7-12
 - commands for managing, (S) *Sys Mgr*
Essentials, 13-46
 - creating, (S) *Sys Mgr Essentials*, 13-15; (S)
Alpha Perform, 6-21
 - default, (P) *Rec Mgmt Util*, 4-24
 - deleting, (S) *Sys Mgr Essentials*, 13-57
 - entering command procedures in, (G) *DCL*
N-Z, DCLII-404
 - for memory constrained systems, (S) *Sys Mgr*
Essentials, 13-31
 - initializing, (S) *VMScluster Sys*, 7-12
 - jobs
 - base priority, (S) *Alpha Perform*, 6-21
 - on standalone workstations, (S) *Sys Mgr*
Essentials, 13-5
 - optimizing for Sort/Merge utility, (S) *Sys Mgr*
Essentials, 13-31
 - options, (S) *Sys Mgr Essentials*, 13-18
 - characteristics, (S) *Sys Mgr Essentials*,
13-28

Batch queues

options (cont'd)

controlling job performance and resources,

(S) *Sys Mgr Essentials*, 13-28

qualifiers for specifying, (S) *Sys Mgr*

Essentials, 13-19 to 13-20

restricting access, (S) *Sys Mgr Essentials*,
13-22

retaining jobs, (S) *Sys Mgr Essentials*,
13-26

pausing, (S) *Sys Mgr Essentials*, 13-53

setting up, (S) *VMScluster Sys*, 7-10

setting up for vector processing, (S) *Sys Mgr*
Tuning, 26-7

starting, (S) *Sys Mgr Essentials*, 13-15; (S)
VMScluster Sys, 7-12

status, (S) *Sys Mgr Essentials*, 13-50

stopping, (S) *Sys Mgr Essentials*, 13-54, 13-55

before shutting down a node, (S) *Sys Mgr*
Essentials, 13-55

SYS\$BATCH, (S) *VMScluster Sys*, 7-12

working set characteristics, (S) *Alpha Perform*,
6-2

Baud rate

of terminal, (P) *I/O User*, 5-42

BDBs (buffer descriptor blocks), (P) *Alpha SDA*,

SDA-75; (P) *VAX SDA*, SDA-80

BDB summary page (BDBSUM), (P) *Alpha SDA*,

SDA-75; (P) *VAX SDA*, SDA-80

/BEFORE qualifier

in Backup utility, (S) *Sys Mgmt Util A-L*, 7-17

/BEGINNING qualifier, (S) *Sys Mgmt Util M-Z*,
4-6

Bell character, (G) *User*, 2-5

Bell filter, (S) *DECamsds*, 2-7

BEST_TRY_CONTIGUOUS attribute, (P) *Rec*
Mgmt Util, 4-6, 4-17; (P) *File Appl*, 3-24,
4-35

Bibliography

publications from Digital, (S) *Dependable*, B-1

publications from other sources, (S)
Dependable, B-4

Binary data, (P) *File Appl*, 1-18

compression of, (P) *Util Routines*, DCX-1

Binary numbers, multiple precision, (P) *LIB\$*,
LIB-5

Binary operators, (P) *Alpha SDA*, SDA-13; (P)
VAX SDA, SDA-16 to SDA-17

Binary output from Audit Analysis utility, (S) *Sys*
Mgmt Util A-L, 4-6

/BINARY qualifier, (P) *Debugger*, 8-11

Binary semaphores, (P) *Concepts*, 14-28

Binary subtraction, (P) *LIB\$*, LIB-429

Binary time

converting to ASCII string, (P) *Sys Svc I*,
SYS1-29

converting to numeric time, (P) *Sys Svc II*,
SYS2-163, SYS2-165

Binary tree, balanced, (P) *LIB\$*, LIB-263

Binary values

converting to ASCII string, (P) *Sys Svc I*,
SYS1-272

%BIN built-in symbol, (P) *Debugger*, 8-12, B-6

Binding resource, (S) *VAX Perform*, 3-8

Binding volumes into a volume set, (S) *Sys Mgr*
Essentials, 8-22

/BIND qualifier

in Mount utility, (S) *Sys Mgmt Util M-Z*, 2-10

BIN key types, (P) *Rec Mgmt Util*, 4-29

BIO (buffered I/O), (S) *DECamsds*, 3-24

byte limit (BYTLM), (S) *DECamsds*, 3-25

limit (BIOLM), (S) *DECamsds*, 3-24

rate, (S) *DECamsds*, 3-17

rate display, (S) *DECamsds*, 2-3

BIOLM process limit, (S) *Sys Mgr Essentials*,
6-41; (P) *Concepts*, 9-3

value for efficient backups, (S) *Sys Mgr*
Essentials, 10-10

BIO option, (P) *Rec Mgmt Util*, 4-3, 4-9

Bit field operator (<p,s,e>), (P) *Debugger*, B-8

Bit fields

replace field, (P) *LIB\$*, LIB-279

return sign extended to longword, (P) *LIB\$*,
LIB-150

BITLM quota

for efficient backups, (S) *Sys Mgr Essentials*,
10-10

BITMAP.SYS file, (P) *File Appl*, 1-7

See Storage bit map file

Bit maps

index file, (P) *File Appl*, 1-7

storage, (P) *File Appl*, 1-7

Bits

unused in passed data, (P) *Calling Std*, 3-50

Bits per inch (bits/inch), (P) *File Appl*, 1-16

Black box testing, (P) *Modular Proc*, 4-2

BLAS

definition, (P) *MTH\$*, 2-1

BLAS1\$VixAMAX routine, (P) *MTH\$*, MTH-149

BLAS1\$VxASUM routine, (P) *MTH\$*, MTH-152

BLAS1\$VxAXPY routine, (P) *MTH\$*, MTH-155

BLAS1\$VxCOPY routine, (P) *MTH\$*, MTH-160

BLAS1\$VxDOT routine, (P) *MTH\$*, MTH-165

BLAS1\$VxNRM2 routine, (P) *MTH\$*, MTH-170

BLAS1\$VxROTG routine, (P) *MTH\$*, MTH-178

BLAS1\$VxROT routine, (P) *MTH\$*, MTH-173

BLAS1\$VxSCAL routine, (P) *MTH\$*, MTH-182

BLAS1\$VxSWAP routine, (P) *MTH\$*, MTH-186

BLBs (buffer lock blocks), (P) *Alpha SDA*,

SDA-75; (P) *VAX SDA*, SDA-80

BLB summary page (BLBSUM), (P) *Alpha SDA*,
SDA-75

BLISS

data type declarations, (P) *Interfaces*, B-24

implementation table, (P) *Interfaces*, B-24

- BLISS-32, (G) *SW Overview*, 4-5; (P) *Environment*, 7-2, 7-4
- BLISS compiler
 - alignment, (P) *Concepts*, 22-5
 - generating reentrant code, (P) *DECthreads*, 3-4
- BLK option, (P) *Rec Mgmt Util*, 4-31
- Block cache allocation, (S) *Sys Mgmt Util M-Z*, 2-30
- Blocked record, (P) *File Appl*, 1-29
- Block I/O, (P) *RMS Ref*, A-33; (P) *File Appl*, 8-15
 - execution contrasted with record I/O execution, (P) *RMS Ref*, A-34
 - how implemented by record management services, (P) *RMS Ref*, A-33
 - how to specify for relative and indexed files, (P) *RMS Ref*, A-35
 - program example, (P) *RMS Ref*, A-35
 - requirements for mixing with record I/O, (P) *RMS Ref*, A-34
 - services, (P) *RMS Ref*, 1-2
 - use of NBP for sequential files, (P) *RMS Ref*, A-35
 - using record management services, (P) *RMS Ref*, A-4
 - with multiple record streams, (P) *RMS Ref*, A-35
 - with record I/O processing, (P) *RMS Ref*, A-35
- Block length field, (P) *File Appl*, 1-30
- Blocks, (S) *DECamds*, 3-8; (P) *File Appl*, 1-4, 3-10
 - disk
 - definition, (S) *Sys Mgr Essentials*, 8-2
 - erasing, (S) *Sys Mgr Essentials*, 8-58; (S) *Sys Mgmt Util A-L*, 3-5
 - Files-11
 - definition, (S) *Sys Mgr Tuning*, A-1
 - tape
 - definition, (S) *Sys Mgr Essentials*, 8-6
- Block size options, (P) *File Appl*, 4-32
 - for files, (G) *DCL A-M*, DCLI-169
 - specifying cluster size on disk, (G) *DCL A-M*, DCLI-250
- /BLOCKSIZE qualifier
 - in Mount utility, (S) *Sys Mgmt Util M-Z*, 2-11
- Block sizes, (P) *Concepts*, 21-10
- Block span options, (P) *File Appl*, 3-14
 - effect on maximum record size, (P) *File Appl*, 2-9
- FDL RECORD section, (P) *File Appl*, 4-33
- BLOCK_COUNT attribute, (P) *Rec Mgmt Util*, 4-31
- BLOCK_IO attribute, (P) *Rec Mgmt Util*, 4-3, 4-9; (P) *File Appl*, 7-3
- /BLOCK_SIZE qualifier
 - in Backup utility, (S) *Sys Mgmt Util A-L*, 7-18
- BLOCK_SPAN attribute, (P) *Rec Mgmt Util*, 4-31; (P) *File Appl*, 3-14, 4-34
- Bookreader, (G) *SW Overview*, 5-6
- Bookreader application
 - versions of OpenVMS Alpha documentation, (S) *Comparison*, B-2
- boolean data type, (P) *Interfaces*, B-2
- Boolean value flag, (P) *Interfaces*, B-2
- Boot block
 - definition, (S) *Sys Mgr Essentials*, 4-17
 - in index file, (S) *Sys Mgr Tuning*, A-6
 - processors using, (S) *Sys Mgr Essentials*, 4-17
 - role in boot process, (S) *Sys Mgr Essentials*, 4-2
 - writing with Writeboot utility, (S) *Sys Mgr Essentials*, 4-17
- BOOT command, (S) *Comparison*, 2-10, 2-11
- Boot events, (S) *VMScluster Sys*, C-2
 - computer fails to boot, (S) *VMScluster Sys*, C-4
 - computer fails to join cluster, (S) *VMScluster Sys*, C-13
- Boot flags
 - DBG_INIT, (S) *Comparison*, 2-11
 - USER_MSGS, (S) *Comparison*, 2-11
- Booting, (G) *SW Overview*, 3-8
 - See also Conversational boot
 - automatically after shutting down, (S) *Sys Mgr Essentials*, 4-29
 - avoiding system disk rebuilds, (S) *VMScluster Sys*, 9-14
 - bootstrap image
 - Alpha, (S) *Sys Mgr Essentials*, 4-18
 - in index file, (S) *Sys Mgr Tuning*, A-6
 - VAX, (S) *Sys Mgr Essentials*, 4-18
 - controlling for satellites, (S) *VMScluster Sys*, 9-10
 - cross-architecture, (G) *V6.2 New Feat*, 6-30; (S) *Sys Mgr Tuning*, 22-23; (S) *VMScluster Sys*, 10-5
 - definition, (S) *Sys Mgr Essentials*, 4-2
 - displaying startup commands, (S) *Sys Mgr Essentials*, 4-14
 - from an alternate system disk, (S) *Sys Mgr Essentials*, 4-3
 - in a multiprocessing system, (S) *Sys Mgr Tuning*, 26-2
 - in an emergency
 - with default system parameters, (S) *Sys Mgr Essentials*, 4-8
 - without startup and login procedures, (S) *Sys Mgr Essentials*, 4-8
 - without the user authorization file, (S) *Sys Mgr Essentials*, 4-10
 - installation of page and swap files, (S) *Sys Mgr Tuning*, 15-5
 - in VMScluster configurations

Booting

in VMScluster configurations (cont'd)

Refer to the *Guidelines for VMScluster Configurations*

loading VVIEF code, (S) *Sys Mgr Tuning*, 26-5

location of computer-specific instructions, (S)

Sys Mgr Essentials, 4-2

minimizing in a large cluster, (S) *VMScluster Sys*, 9-4

nodes into an existing VMScluster, (S)

VMScluster Sys, 8-36, 8-43

nonstop, (S) *Sys Mgr Essentials*, 4-3

problems

fixing by booting with default parameter values, (S) *Sys Mgr Essentials*, 4-8

fixing by booting with minimum startup, (S) *Sys Mgr Essentials*, 4-14

hardware, (S) *Sys Mgr Essentials*, 4-16

invalid boot block, (S) *Sys Mgr Essentials*, 4-17

solving, (S) *Sys Mgr Essentials*, 4-16

remote services, (G) *SW Overview*, 6-24

satellites, (S) *VMScluster Sys*, 3-7

preparation, (S) *VMScluster Sys*, 9-4

use of boot block, (S) *Sys Mgr Essentials*, 4-17

with an alternate system parameter file, (S)

Sys Mgr Essentials, 4-7

with controlled system startup, (S) *Sys Mgr Essentials*, 4-12

Boot messages

indicating execution of STARTUP.COM

procedure, (S) *Sys Mgr Essentials*, 4-5

indicating execution of STARTUP_VMS.COM

procedure, (S) *Sys Mgr Essentials*, 4-5

indicating success, (S) *Sys Mgr Essentials*, 4-5

indicating that login is possible, (S) *Sys Mgr Essentials*, 4-5

question mark (?), (S) *Sys Mgr Essentials*, 4-16

BOOTP, protocol for network booting, (S) *TCP/IP*, 2-5

Boot servers

after configuration change, (S) *VMScluster Sys*, 8-33

defining maximum DECnet address value, (S) *VMScluster Sys*, 4-7

functions, (S) *VMScluster Sys*, 3-7

rebooting a satellite, (S) *VMScluster Sys*, 8-41

Bootstrap block, (P) *File Appl*, 1-6

Bootstrapping

See Booting

Bootstraps

primary, (S) *DECnet Mgmt*, 4-4, 4-11

ROM, (S) *DECnet Mgmt*, 4-4

Borders

virtual display, (P) *Concepts*, 7-11

Borrowing

analyzing problems, (S) *Alpha Perform*, 13-5

deciding when too generous, (S) *Alpha Perform*, 13-11

tuning to make more effective, (S) *Alpha Perform*, 17-4

BORROWLIM system parameter

page faulting, (S) *VAX Perform*, 2-7

Boss/worker model, (P) *DECthreads*, 1-5

work queue variation, (P) *DECthreads*, 1-5

BOT (beginning-of-tape)

See BOT markers and Magnetic tapes

BOT markers, (S) *Sys Mgr Essentials*, 8-6; (P) *File Appl*, 1-19

Bottlenecks, (S) *VAX Perform*, 3-8

Boundary tags, (P) *Concepts*, 21-8

Bound procedure descriptors, (P) *Calling Std*, 3-42

Bound procedures, (P) *Calling Std*, 3-42

definition, (P) *Calling Std*, 1-4

environment value, (P) *Calling Std*, 3-44

Bound procedure values, (P) *Modular Proc*, 3-8; (P) *Calling Std*, 3-3, 3-43

/BPAGE qualifier, (P) *Linker*, LINK-5

BPDA centers

See Business Partner Development Assistance centers

Branching

using DOWN command, (P) *Rec Mgmt Util*, 1-17

Break-in alarms, (S) *Security*, D-3

Break-in attempts, (G) *User*, 2-12; (S) *Security*, 1-2, 3-9

auditing, (G) *User*, 19-10; (S) *Security*, 9-3, 9-7; (S) *Sys Mgr Tuning*, 18-25

counteraction through dual passwords, (S) *Security*, 7-15

detecting, (S) *Security*, 7-26, 7-29

evasion, (G) *User*, 2-12

evasive procedures, (S) *Security*, 3-9

security audit report and, (S) *Security*, 9-22

Break key and secure servers, (S) *Security*, 7-26

Breakpoints

action, (P) *Debugger*, 3-12, 7-9

activating, (P) *Debugger*, 2-5, 3-10, 7-11

canceling, (P) *Debugger*, 3-10, 7-11

conditional, (P) *Debugger*, 3-10, 7-9

customizing display of Set/Show Breakpoint dialog box, (P) *Debugger*, 3-35

deactivating, (P) *Debugger*, 3-10, 7-11

defined, (P) *Debugger*, 3-8, 7-4

delayed triggering of, (P) *Debugger*, 7-9

displaying, (P) *Debugger*, 3-10, 7-5

DO clause, (P) *Debugger*, 7-9

exception, (P) *Debugger*, 3-9, 13-10

in tasking (multithread) program, (P) *Debugger*, 16-25

Breakpoints (cont'd)

- on activation (multiprocess program), (P) *Debugger*, 14-13
- on label, (P) *Debugger*, 7-6
- on routine, (P) *Debugger*, 3-9, 7-6
- on source line, (P) *Debugger*, 3-8, 7-6
- on task event, (P) *Debugger*, 16-28
- on termination (image exit), (P) *Debugger*, 14-13
- on vector instruction, (P) *Debugger*, 15-3
- predefined, tasking (multithread) program, (P) *Debugger*, 16-30
- saving when rerunning program, (P) *Debugger*, 2-5, 5-9
- saving with RERUN command, (P) *Debugger*, 5-9
- setting, (P) *Debugger*, 3-8, 7-4
- source display at, (P) *Debugger*, 10-7
- WHEN clause, (P) *Debugger*, 7-9
- Breakpoint View, (P) *Debugger*, 1-8, 3-10
- Bridges, (S) *DECnet Intro*, 1-7
 - failover, (S) *VMScluster Sys*, 3-20
 - network, (S) *Sys Mgr Tuning*, 21-7
- Brief format listings, (S) *Sys Mgmt Util A-L*, 4-7
- Brief image map files, (P) *Linker*, LINK-6
- BRIEF prompt, (P) *Rec Mgmt Util*, 6-9
- /BRIEF qualifier, (P) *Linker*, LINK-6
 - in Backup utility, (S) *Sys Mgmt Util A-L*, 7-18
- Brief report
 - example, (S) *Sys Mgmt Util A-L*, 9-22
- Broadcast addresses, (S) *DECnet Mgmt*, 1-6
- BROADCAST device setting, (S) *Sys Mgr Tuning*, 18-23
- Broadcast intervals, (S) *DECamds*, B-4
 - setting for node availability messages, (S) *DECamds*, 1-10
- Broadcast messages, (S) *VMScluster Sys*, 10-10; (P) *Concepts*, 7-42; (P) *I/O User*, 5-19, 5-22, 5-24, 5-49
- See also Messages
- alternate handler, (P) *Concepts*, 7-42
- default handler, (P) *Concepts*, 7-42
- Broadcast routing timer, (S) *DECnet Mgmt*, 2-24
- BRO option, (P) *Rec Mgmt Util*, 4-3
- Browsers
 - Lynx, (S) *TCP/IP*, 3-5
 - Mosaic, (S) *TCP/IP*, 3-5
- BRS (Business Recovery Server), (G) *SW Overview*, 2-12, 7-10
 - configuring an FDDI VAXcluster
 - overview of product, (S) *Dependable*, 5-12
 - configuring an FDDI VMScluster
 - overview of product, (S) *Dependable*, 6-18, 7-14
 - managing, (G) *SW Overview*, 2-14

- BSD (Berkeley Software Distribution), (S) *TCP/IP*, 1-6
- BSR instruction
 - substituting for the JSR instruction, (P) *Linker*, 1-15, LINK-25
- \$BSS\$ program section name
 - definition, (P) *Linker*, B-16
- Bucket boundary
 - file organization considerations, (P) *RMS Ref*, 4-4
- Bucket reclamation statistics, (P) *Util Routines*, CONV-17
- Buckets, (P) *Rec Mgmt Util*, 1-2, 4-5, 4-26; (P) *File Appl*, 3-10, 3-20
 - boundary, (P) *Rec Mgmt Util*, 4-34; (P) *File Appl*, 3-22
 - definition, (P) *File Appl*, 2-1
 - examining, (P) *Rec Mgmt Util*, 1-3
 - fill, (P) *Rec Mgmt Util*, 4-27
 - fill percentage, (P) *Rec Mgmt Util*, 2-11
 - list of free, (P) *Rec Mgmt Util*, 3-1
 - reclaiming, (P) *Rec Mgmt Util*, 3-1; (P) *File Appl*, 3-20, 10-28
 - reclaiming with CONV\$RECLAIM routine, (P) *Util Routines*, CONV-16
 - split, (P) *Rec Mgmt Util*, 1-3
- Bucket size option, (P) *File Appl*, 4-32
- Bucket sizes, (P) *File Appl*, 3-24 to 3-26, A-1
 - for indexed files, (P) *File Appl*, 7-18
 - for relative files, (P) *File Appl*, 7-18
- Bucket splits, (P) *File Appl*, 3-10, 3-23, 9-12
 - cleaning up, (P) *File Appl*, 10-28
 - minimizing, (P) *RMS Ref*, 12-4; (P) *File Appl*, 3-26
- BUCKET_IO attribute, (P) *Rec Mgmt Util*, 4-9
- BUCKET_SIZE attribute, (P) *Rec Mgmt Util*, 4-7, 4-17; (P) *File Appl*, 4-32, 7-18
- Buffer areas
 - requirement for Get service, (P) *File Appl*, 8-2
- Buffer caches, (P) *File Appl*, 7-4, 7-17
 - for storing index levels, (P) *File Appl*, 7-18
 - types, (P) *File Appl*, 7-19
 - using with multistreaming, (P) *File Appl*, 7-4
- Buffer description blocks
 - See BDBs
- Buffer descriptor table entries, (S) *VMScluster Sys*, 9-20
- Buffered I/O
 - See also BIO
 - byte count limit, (S) *Sys Mgr Essentials*, 6-42
 - count limit, (S) *Sys Mgr Essentials*, 6-41
 - definition, (S) *Alpha Perform*, 14-1
 - in relation to terminal operation problems, (S) *VAX Perform*, 4-29; (S) *Alpha Perform*, 14-4

- Buffered I/O byte count quota, (P) *File Appl*, 9-8
- Buffered I/O count, (P) *Rec Mgmt Util*, 2-17
- Buffered I/O operations, (P) *Concepts*, 5-18
- Buffered I/O quota, (P) *I/O User*, 2-27, 3-10, 4-5
- Buffering modes, (P) *SMG\$*, 2-16
- Buffering techniques, (P) *File Appl*, 7-15 to 7-21
- Buffer-offset length field, (P) *File Appl*, 1-31
- Buffers
 - See also Global buffers
 - I/O, (P) *File Appl*, 3-2, 7-15
 - key, (P) *File Appl*, 9-12, 9-14, 9-16
 - local, (P) *File Appl*, 3-12, 3-28, 7-19
 - multiple, (P) *File Appl*, 3-11
 - number of, (P) *File Appl*, 3-14, 3-27
 - recall DCL command, (G) *User*, 3-14
 - record header, (P) *File Appl*, 9-15, 9-17, 9-18
 - selecting for optimum performance, (P) *File Appl*, 7-16 to 7-17
 - space allocation, (P) *File Appl*, 7-16
 - user, (P) *File Appl*, 9-15, 9-16
- Buffer sizes, (G) *Compatibility*, 4-2
 - changing for executor, (S) *DECnet Mgmt*, 3-15
 - decreasing, (S) *DECnet Mgmt*, 3-15
 - for executor, (S) *DECnet Mgmt*, 2-4
 - for line, (S) *DECnet Mgmt*, 3-14, 3-41
 - increasing, (S) *DECnet Mgmt*, 3-15
 - in mixed-architecture VMScluster system, (G) *Compatibility*, 4-17, 4-19
 - requirements, (S) *DECnet Mgmt*, 3-15
 - setting for executor, (S) *DECnet Mgmt*, 3-14
- /BUFFER_COUNT qualifier, (P) *File Appl*, 7-17, 7-18, 7-19
 - in Backup utility, (S) *Sys Mgmt Util A-L*, 7-19
- /BUFFER_OBJECTS qualifier, (P) *Alpha SDA*, SDA-127
- Bugcheck code, (P) *VAX SDA*, SDA-19
- BUGCHECKFATAL parameter, (S) *Alpha Perform*, 10-10
- Bugcheck handling routines
 - global symbols, (P) *VAX SDA*, SDA-64
- Bugcheck message
 - during UETP, (S) *Sys Mgr Tuning*, 17-30
- Bugchecks
 - code, (P) *Alpha SDA*, SDA-18
 - fatal conditions, (P) *Alpha SDA*, SDA-19 to SDA-27; (P) *VAX SDA*, SDA-20 to SDA-24
 - halt/restart, (P) *Alpha SDA*, SDA-8; (P) *VAX SDA*, SDA-9
 - handling routines
 - global symbols, (P) *Alpha SDA*, SDA-61
 - identifying, (P) *VAX SDA*, SDA-25
 - reason for taking, (P) *VAX SDA*, SDA-100
 - reasons, (P) *Alpha SDA*, SDA-90
- BUGCHK privilege, (S) *Security*, A-3
- Bugs
 - latent, (G) *Compatibility*, 4-14
- Building blocks, (S) *Dependable*, 1-1, 1-14
- communications, (S) *Dependable*, 1-15, 7-1
 - allowing for LAN bridge failover, (S) *Dependable*, 7-9
- alternate adapter booting for satellite nodes, (S) *Dependable*, 7-9
- applying dependability strategies, (S) *Dependable*, 1-16
- degrees of protection from faults, (S) *Dependable*, 7-2
- Ethernet and FDDI options, (S) *Dependable*, 7-8
- options, (S) *Dependable*, 3-5 to 3-7
- providing multiple paths to Ethernet and FDDI, (S) *Dependable*, 7-4
- providing multiple WAN connections for VAXft systems, (S) *Dependable*, 7-15
- recommendations for VMScluster environments, (S) *Dependable*, 7-5
- sample multiadapter connections to LAN segments, (S) *Dependable*, 7-6
- sample VMScluster failure analysis program, (S) *Dependable*, 7-9, 7-10
- using DECnet cluster aliases, (S) *Dependable*, 7-15
- using FDDI as VMScluster interconnect, (S) *Dependable*, 7-12
- VMScluster satellite synonym, (S) *Dependable*, 7-9
- dependability considerations, (S) *Dependable*, 3-1
- environmental factors, (S) *Dependable*, 1-15 to 1-16
 - options, (S) *Dependable*, 3-2 to 3-3
- hardware, (S) *Dependable*, 1-15 to 1-16
 - conventional Alpha and VAX systems, (S) *Dependable*, 6-5
- dependability characteristics summary, (S) *Dependable*, 6-20
- eliminating single points of failure, (S) *Dependable*, 6-1
- fault tolerant VAXft systems, (S) *Dependable*, 6-8
- options, (S) *Dependable*, 3-3 to 3-5
- VMScluster topologies, (S) *Dependable*, 6-10
- operational procedures, (S) *Dependable*, 1-15 to 1-16
 - options, (S) *Dependable*, 3-12 to 3-14
- personnel, (S) *Dependable*, 1-15 to 1-16
 - help from Digital consulting, (S) *Dependable*, 10-1
 - options, (S) *Dependable*, 3-15 to 3-16
- software, (S) *Dependable*, 1-15 to 1-16, 8-1
 - application software dependability features, (S) *Dependable*, 8-35 to 8-58
 - managing shared information, (S) *Dependable*, 8-58 to 8-61

Building blocks

software (cont'd)

OpenVMS features, (S) *Dependable*, 8-10 to 8-28

options, (S) *Dependable*, 3-7 to 3-12

Building dependable systems, (S) *Dependable*, 1-1 to 1-5

achieving balance, (S) *Dependable*, 1-17

analyzing system requirements, (S)

Dependable, 2-1

application software features, (S) *Dependable*, 8-35 to 8-58

building blocks, (S) *Dependable*, 1-14

characteristics, (S) *Dependable*, 1-9

communications, (S) *Dependable*, 1-15 to 1-16

options, (S) *Dependable*, 3-5 to 3-7

considerations for applications, (S) *Dependable*, 8-1

construction phase, (S) *Dependable*, 1-12

consulting from Digital, (S) *Dependable*, 10-1

environmental factors, (S) *Dependable*, 1-15 to 1-16

options, (S) *Dependable*, 3-2 to 3-3

hardware, (S) *Dependable*, 1-15 to 1-16

options, (S) *Dependable*, 3-3 to 3-5

maintaining dependable environment, (S)

Dependable, 5-1

managing shared information, (S) *Dependable*, 8-58 to 8-61

networks, (S) *Dependable*, 7-1

allowing for LAN bridge failover, (S) *Dependable*, 7-9

alternate adapter booting for satellite nodes, (S) *Dependable*, 7-9

degrees of protection from faults, (S) *Dependable*, 7-2

Ethernet and FDDI options, (S) *Dependable*, 7-8

proactive network monitoring and analysis products, (S) *Dependable*, 7-17

providing multiple paths to Ethernet and FDDI, (S) *Dependable*, 7-4

providing multiple WAN connections for VAXft systems, (S) *Dependable*, 7-15

recommendations for VMScluster environments, (S) *Dependable*, 7-5

sample multiadapter connections to LAN segments, (S) *Dependable*, 7-6

sample VMScluster failure analysis program, (S) *Dependable*, 7-9, 7-10

using DECnet cluster aliases, (S) *Dependable*, 7-15

using FDDI as VMScluster interconnect, (S) *Dependable*, 7-12

VMScluster satellite synonym, (S) *Dependable*, 7-9

OpenVMS features, (S) *Dependable*, 8-10 to 8-28

Building dependable systems (cont'd)

operational phase, (S) *Dependable*, 1-12

operational procedures, (S) *Dependable*, 1-15 to 1-16

options, (S) *Dependable*, 3-12 to 3-14

personnel, (S) *Dependable*, 1-15 to 1-16

options, (S) *Dependable*, 3-15 to 3-16

primary strategies, (S) *Dependable*, 1-9 to 1-12

prototyping applications, (S) *Dependable*, 8-31 to 8-33

redundant functional units, (S) *Dependable*, 1-13 to 1-14

requirements levels, (S) *Dependable*, 1-1

software, (S) *Dependable*, 1-15 to 1-16

options, (S) *Dependable*, 3-7 to 3-12

testing applications, (S) *Dependable*, 8-33 to 8-34

understanding your options, (S) *Dependable*, 3-1

writing dependable code, (S) *Dependable*, 8-29 to 8-31

Built-in symbols, (P) *Debugger*, 6-2, B-3

Burst bars, (S) *Sys Mgr Essentials*, 13-33

Burst pages, (S) *Sys Mgr Essentials*, 13-33

file, (S) *Sys Mgr Essentials*, 13-35

job, (S) *Sys Mgr Essentials*, 13-33

Bus adapters

generic names, (S) *Sys Mgmt Util M-Z*, 5-23

listing, (S) *Sys Mgmt Util M-Z*, 5-23

nexus numbers, (S) *Sys Mgmt Util M-Z*, 5-23

specifying, (S) *Sys Mgmt Util M-Z*, 5-5, 5-9

Buses, (G) *SW Overview*, 1-5

display on Alpha systems, (S) *Sys Mgmt Util M-Z*, 6-39; (S) *Comparison*, A-7

Business considerations

coping with disasters, (S) *Dependable*, 5-12

Business Recovery Server

See BRS

/BUS qualifier, (P) *Alpha SDA*, SDA-124; (P) *VAX SDA*, SDA-141

Bus support, (G) *Compatibility*, 2-3

Busy queue status, (S) *Sys Mgr Essentials*, 13-51

Busy wait option, (P) *Modular Proc*, 3-16

Buttons

debugger push button pane, (P) *Debugger*, 1-8 customizing, (P) *Debugger*, 3-28

BYE datagram, (S) *VMScluster Sys*, F-24

BYPASS privilege, (S) *DECnet Mgmt*, 5-1; (P) *Concepts*, 9-5

description, (S) *Security*, A-3

effect on control access, (S) *Security*, 4-28

overriding access controls, (S) *Security*, 4-11, 4-28

Byte dumps, (G) *DCL A-M*, DCLI-183

Byte limit remaining for process I/O, (S) *DECamsds*, 3-17
 BYTELM (buffered I/O byte count) quota, (P) *Concepts*, 9-3
 Bytes, (P) *File Appl*, 1-1
 byte_signed data type, (P) *Interfaces*, B-2
 BYTLM process limit, (S) *Sys Mgr Essentials*, 6-42
 value for efficient backups/nomaster, (S) *Sys Mgr Essentials*, 10-10
 BYTLM quota
 limiting size of user's ACL buffer, (P) *RMS Ref*, 13-3
 using with \$GETJPI buffers, (P) *Sys Svc II*, SYS2-176

C

C, (G) *Compatibility*, 1-10; (P) *Environment*, 7-2, 7-5
 data type declarations, (P) *Interfaces*, B-27
 DEC C for OpenVMS Alpha, (G) *SW Overview*, 4-5
 header files for defining macros, (G) *Compatibility*, 4-6
 implementation table, (P) *Interfaces*, B-27
 LIB\$ESTABLISH, (G) *Compatibility*, 4-4
 programming examples implementing RMS, (P) *RMS Ref*, 3-1
 VAX C, (G) *SW Overview*, 4-5
 C++, (G) *SW Overview*, 4-5; (G) *Compatibility*, 1-10; (P) *Environment*, 1-4, 7-2, 7-5
 C++ RTL object library, (G) *V6.2 New Feat*, 4-11
 C2-class system
 installing OpenVMS to use, (S) *Sys Mgr Essentials*, 3-2
 C2 environments, (S) *Security*, C-1
 C2 security
 DEC Rdb compliance with, (S) *Dependable*, 8-48
 features, (G) *Compatibility*, 1-7
 C2 security, systems, (S) *Security*, C-1 to C-10
 Cables, (S) *DECnet Intro*, 1-2, 1-7
 configurations, (S) *VMScluster Sys*, C-23
 Ethernet, (S) *DECnet Intro*, 1-6
 null modem, (S) *DECnet Intro*, 3-19
 cabs routine, (P) *Portable Math*, DPML-12, B-3
 /CACHED qualifier, (P) *VAX SDA*, SDA-122
 /CACHE qualifier
 in Mount utility, (S) *Sys Mgmt Util M-Z*, 2-12
 Caches
 buffer, (P) *File Appl*, 7-4
 for file sharing, (P) *File Appl*, 9-6
 global, (P) *File Appl*, 7-20
 specifying as read-only, (P) *File Appl*, 7-21
 with multiple buffers, (P) *File Appl*, 9-9
 file system
 Caches
 file system (cont'd)
 adjusting, (S) *VAX Perform*, 5-14; (S) *Alpha Perform*, 18-6
 memory, (P) *File Appl*, 3-15, 3-17, 3-18, 3-27
 for file sharing, (P) *File Appl*, 3-18
 for random processing, (P) *File Appl*, 3-17
 for storing index, (P) *File Appl*, 3-26
 relative to bucket size, (P) *File Appl*, 3-26
 primary page, (S) *Alpha Perform*, 5-1
 process local, (P) *File Appl*, 3-12
 secondary page, (S) *VAX Perform*, 3-24; (S) *Alpha Perform*, 10-5
 tape, (P) *I/O User*, 3-5
 write-back volatile, (P) *I/O User*, 3-5
 virtual I/O, (S) *VAX Perform*, 3-37; (S) *Alpha Perform*, 18-1
 observing statistics, (S) *Comparison*, 5-17
 CACHE_SERVER process
 creation during system startup, (S) *Sys Mgr Essentials*, 5-5
 Caching, (P) *Concepts*, 15-18
 ACP system parameters, (S) *Sys Mgr Essentials*, 8-43
 CALC.COM command procedure, (G) *User*, C-25
 sample execution, (G) *User*, C-27
 Callable interface of DECTPU routines, (P) *Util Routines*, DECTPU-1
 Callable system routines, (G) *SW Overview*, 4-9
 Call chain, (P) *Concepts*, 13-49; (P) *Calling Std*, 3-29
 how to walk, (P) *Calling Std*, 3-33
 transfer of control, (P) *Calling Std*, 3-37
 CALL command, (G) *DCL A-M*, DCLI-52 to DCLI-55; (P) *Debugger*, 12-11
 and ASTs, (P) *Debugger*, 13-17
 multiprocess program, (P) *Debugger*, 14-6
 vectorized program, (P) *Debugger*, 15-22
 Call conventions
 invocation and return, (P) *Calling Std*, 3-37
 Call entry
 for RTL, (P) *Interfaces*, 3-4
 for system service, (P) *Interfaces*, 4-3
 Caller access mode, (P) *RMS Ref*, 4-6
 %CALLER_TASK built-in symbol, (P) *Debugger*, 16-14
 Call-frame condition handlers, (P) *Concepts*, 13-24
 Call-frame handlers, (P) *Debugger*, 13-13
 Call frames, (P) *Interfaces*, 2-3
 definition, (P) *Calling Std*, 1-4
 displaying in SDA, (P) *Alpha SDA*, SDA-78; (P) *VAX SDA*, SDA-83
 following a chain, (P) *Alpha SDA*, SDA-78; (P) *VAX SDA*, SDA-83
 removing from stack, (P) *Sys Svc II*, SYS2-407

- Calling convention, (P) *MTH\$*, 1-2
- Calling FDL\$PARSE and FDL\$RELEASE from a Pascal program, (P) *File Appl*, 4-13
- Calling sequence, (P) *Calling Std*, 2-3; (P) *RMS Ref*, 2-4
 - argument list, (P) *Calling Std*, 2-3
 - system routine, (P) *Interfaces*, 2-5
- Calling standard, (G) *SW Overview*, 4-2; (P) *Environment*, 10-3; (P) *Interfaces*, 3-1
 - architectural level, (P) *Calling Std*, 1-2
 - conventions, (P) *Interfaces*, 2-1
 - for calling services, (P) *RMS Ref*, A-3
 - goals, (P) *Calling Std*, 1-2, 1-3
 - programming, (P) *Environment*, 7-1
 - terms, (P) *Calling Std*, 1-4
- Call-in-progress count, (P) *Modular Proc*, 3-19
- Calls
 - with computed addresses, (P) *Calling Std*, 3-41
- /CALLS qualifier, (P) *Debugger*, 16-28
- Call stacks
 - See also Scopes
 - and instruction display, (P) *Debugger*, 3-22, 11-10
 - and register display, (P) *Debugger*, 3-22, 11-11
 - and source display, (P) *Debugger*, 3-22, 11-6
 - and symbol search, (P) *Debugger*, 3-22, 9-9
 - displaying, (P) *Debugger*, 3-6, 3-22, 6-7, 13-12
 - unwinding, (P) *Concepts*, 13-46; (P) *Sys Svc II*, SYS2-94
- Call tracing, (P) *Calling Std*, 3-30
- Cancel
 - asynchronous delivery and exception handlers, (P) *DECthreads*, pthread-66
 - delivery, (P) *DECthreads*, pthread-20
 - enabling and disabling asynchronous delivery of, (P) *DECthreads*, pthread-66
 - enabling and disabling delivery of, (P) *DECthreads*, pthread-68
 - possible dangers of disabling, (P) *DECthreads*, pthread-68
 - requesting delivery of, (P) *DECthreads*, pthread-75
 - sending to a thread, (P) *DECthreads*, pthread-20
- Cancelability
 - asynchronous, (P) *DECthreads*, pthread-66
 - general, (P) *DECthreads*, pthread-68
- CANCEL BREAK command, (P) *Debugger*, 7-11
- CANCEL command, (G) *DCL A-M*, DCLI-56 to DCLI-57
- CANCEL DISPLAY command, (P) *Debugger*, 11-12
- Cancel I/O routine, (P) *Alpha SDA*, SDA-94; (P) *VAX SDA*, SDA-105
- CANCEL IMAGE command, (P) *Debugger*, 9-13
- Canceling
 - characteristics on a queue, (S) *Sys Mgr Essentials*, 13-59
 - exit handlers, (P) *Sys Svc I*, SYS1-79
 - I/O requests, (P) *Sys Svc I*, SYS1-77
 - logical name assignments, (G) *DCL A-M*, DCLI-106
 - of detached process wakeup request, (G) *DCL N-Z*, DCLII-57
 - of subprocess wakeup requests, (G) *DCL N-Z*, DCLII-57
 - timer requests, (P) *Sys Svc I*, SYS1-80
 - wakeup requests, (P) *Sys Svc I*, SYS1-82
- CANCEL MODULE command, (P) *Debugger*, 9-6
- CANCEL RADIX command, (P) *Debugger*, 8-11
- CANCEL SCOPE command, (P) *Debugger*, 9-11
- CANCEL SOURCE command, (P) *Debugger*, 9-11
- CANCEL TRACE command, (P) *Debugger*, 7-11
- CANCEL TYPE/OVERRIDE command, (P) *Debugger*, 8-26
- CANCEL WATCH command, (P) *Debugger*, 7-13
- CANCEL WINDOW command, (P) *Debugger*, 11-15
- Capability fields, (P) *SMG\$*, 5-3
 - Boolean, (P) *SMG\$*, 5-4
 - characters with normal ASCII value, (P) *SMG\$*, 5-13
 - creating, (P) *SMG\$*, 5-16
 - nonprinting characters, (P) *SMG\$*, 5-13
 - numeric, (P) *SMG\$*, 5-5
 - padding, (P) *SMG\$*, 5-14
 - string, (P) *SMG\$*, 5-6
 - used by SMG, (P) *SMG\$*, 5-21
 - user-defined renditions, (P) *SMG\$*, 5-12
- Capability objects
 - as protected objects, (S) *Security*, 4-10
 - elements of, (S) *Security*, 5-1
 - reestablishing profile, (S) *Security*, 5-2
 - template profile, (S) *Security*, 5-2
 - types of access, (S) *Security*, 5-1
- Capacity diagrams
 - system kernel, (S) *Dependable*, 4-8
- Capacity planning
 - service from Digital, (S) *Dependable*, 10-2
- Captive accounts, (G) *SW Overview*, 5-2; (S) *Security*, 3-4, 7-7; (S) *Sys Mgr Essentials*, 6-13, 6-29
- See also Accounts
- command procedures, (S) *Security*, 7-9
- disabling mail and notification of delivery, (S) *Security*, 7-24
- example of production account, (S) *Security*, 7-5
- locked passwords and, (S) *Security*, 7-8
- when to use, (S) *Security*, 7-4

- Capturing data for troubleshooting, (S) *VMScluster Sys*, F-28
- Card reader driver, (G) *Compatibility*, 1-7
- Card readers
 - Refer also to the *OpenVMS VAX Card Reader, Line Printer, and LPA11-K I/O User's Reference Manual*
 - end of batch job, (G) *DCL A-M*, DCLI-208
 - operating, (S) *Sys Mgr Essentials*, 7-17
 - translation modes, (S) *Sys Mgr Essentials*, 7-18
- Cards
 - decks, (S) *Sys Mgr Essentials*, 7-17
 - submitting batch job on, (G) *DCL A-M*, DCLI-277
- Carriage control, (P) *Rec Mgmt Util*, 2-3, 4-32; (P) *I/O User*, 5-38
- CARRIAGE_CONTROL attribute, (P) *Rec Mgmt Util*, 4-32; (P) *File Appl*, 4-34
- CARRIAGE_RETURN keyword, (P) *Rec Mgmt Util*, 4-32
- Carrier sense on Ethernet, (S) *DECnet Mgmt*, 1-5
- CASE, (S) *Dependable*, 3-8
 - See also COHESION and DECset
- Case sensitivity, (S) *TCP/IP*, 5-2; (P) *Modular Proc*, A-4; (P) *Debugger*, 13-9
 - in DCL command lines, (G) *User*, 3-2
 - of argument to linker options, (P) *Linker*, LINK-45
 - using SET FIND CASE EXACT command, (G) *User*, 8-32
 - with REPLACE command in EVE, (G) *User*, 8-32
- Case studies
 - DEC Reliable Transaction Router, (S) *Dependable*, 8-2 to 8-10
 - lights out data center, (S) *Dependable*, 11-1 to 11-19
- CASE_SENSITIVE= option, (P) *Linker*, LINK-45
- Catalog
 - optional software products, (G) *Compatibility*, 1-9
 - third-party applications, (G) *Compatibility*, 1-9
- Catastrophic failures
 - in hardware components, (S) *Dependable*, 9-12
- Catchall handlers, (P) *Concepts*, 13-25, 13-43; (P) *Debugger*, 13-13
- CATCH exception, (P) *DECthreads*, 4-4
- CATCH_ALL exception, (P) *DECthreads*, 4-8
- cbprt routine, (P) *Portable Math*, DPML-13, B-3
- CBT option, (P) *Rec Mgmt Util*, 4-7, 4-17
- CCBs (channel control blocks)
 - displaying in SDA, (P) *Alpha SDA*, SDA-75; (P) *VAX SDA*, SDA-80
- CCITT (International Telegraph and Telephone Consultative Committee), (G) *SW Overview*, 6-3, A-1
- C compiler
 - generating reentrant code, (P) *DECthreads*, 3-4
- CCO option, (P) *Rec Mgmt Util*, 4-13
- ccos routine, (P) *Portable Math*, DPML-14, B-3
- CC protocol
 - CC header, (S) *VMScluster Sys*, F-23
 - part of NISCA transport protocol, (S) *VMScluster Sys*, F-3
 - setting the TR/CC flag, (S) *VMScluster Sys*, F-25
- CCSTART datagram, (S) *VMScluster Sys*, F-17, F-24
- CDA compound document architecture, (G) *SW Overview*, 7-17
- CDA Viewer, (G) *SW Overview*, 5-6, 5-7
- CDD/Repository, (G) *SW Overview*, 6-15, 7-17; (S) *Dependable*, 8-59; (P) *Environment*, 7-4, 7-6, 7-7, 7-9, 7-10
- CDDBs (class driver data blocks), (P) *Alpha SDA*, SDA-95; (P) *VAX SDA*, SDA-106
- CDDB symbol, (P) *VAX SDA*, SDA-17
- cdiv routine, (P) *Portable Math*, DPML-15, B-4
- CD-ROM (compact disc read-only memory), (G) *SW Overview*, 1-6, 6-8; (S) *Sys Mgr Essentials*, 8-4 to 8-5; (P) *File Appl*, 1-3, 1-4
 - accessing ISO 9660-formatted, (S) *Sys Mgr Essentials*, 8-34
 - accessing with the InfoServer Client for OpenVMS, (S) *Sys Mgr Tuning*, 23-10
 - concepts, (P) *File Appl*, 1-11
 - formats, (P) *File Appl*, 1-12
 - formats for automatic serving, (S) *Sys Mgr Tuning*, 23-2
 - on OpenVMS Alpha
 - documentation, (S) *Comparison*, 2-24, B-2
 - installation media, (S) *Comparison*, 2-24
 - storing data and audio information, (P) *I/O User*, 2-5
 - using Digital System Identifiers, (P) *File Appl*, 1-13
 - volume structure, (P) *File Appl*, 1-12
- CDRP (class driver request packet), (P) *Alpha SDA*, SDA-84, SDA-144; (P) *VAX SDA*, SDA-91, SDA-166
- CDS (Cell Directory Server), (G) *SW Overview*, 2-10, 6-13; (P) *Environment*, 3-6
- CDT (connection descriptor table), (P) *Alpha SDA*, SDA-84, SDA-144; (P) *VAX SDA*, SDA-166
- CDU
 - See Command Definition utility
- ceil routine, (P) *Portable Math*, DPML-16, B-4

- Cell Directory Server
 - See CDS
- Cells, (P) *Rec Mgmt Util*, 1-2, 4-34
 - fixed-length, (P) *File Appl*, 3-15
 - record structure and, (P) *File Appl*, 10-15
- Central processing units
 - See CPUs
- cexp routine, (P) *Portable Math*, DPML-17, B-4
- Chaining, (P) *Concepts*, 6-5
- Change-mode handlers, (P) *Concepts*, 13-12
 - declaring, (P) *Sys Svc I*, SYS1-176
- Change process priority fix, (S) *DECamsd*, 4-4
- CHANGES attribute, (P) *Rec Mgmt Util*, 4-25
- Changing formats (of software kits), (S) *Sys Mgmt Util M-Z*, 3-7
- Changing queue options, (G) *DCL N-Z*, DCLII-366
- Changing scheduling priority for a batch or print job, (S) *Sys Mgr Essentials*, 13-72
- Changing size of page, swap, and dump files
 - recommended method, (S) *Sys Mgr Tuning*, 15-22
- Changing system parameters
 - with conversational boot, (S) *Sys Mgr Tuning*, 14-36
 - with SYSGEN, (S) *Sys Mgr Tuning*, 14-33
- Changing the DEFAULT form, (S) *Sys Mgr Essentials*, 13-63
- Changing the system parameter file
 - with SYSGEN, (S) *Sys Mgr Tuning*, 14-33
 - with SYSMAN, (S) *Sys Mgr Tuning*, 14-28
- Channel access mode protection option, (P) *RMS Ref*, 4-6
- Channel control blocks
 - See CCBs
- Channel Control protocol
 - See CC protocol
- channel data type, (P) *Interfaces*, B-2
- Channel formation
 - acknowledging with VERF datagram, (S) *VMScluster Sys*, F-17, F-24
 - BYE datagram, (S) *VMScluster Sys*, F-24
 - completing with VACK datagram, (S) *VMScluster Sys*, F-17, F-24
 - handshake, (S) *VMScluster Sys*, F-17
 - HELLO datagrams, (S) *VMScluster Sys*, F-17, F-24
 - multiple, (S) *VMScluster Sys*, F-20
 - opening with CCSTART datagram, (S) *VMScluster Sys*, F-17
 - problems, (S) *VMScluster Sys*, F-17
- /CHANNEL qualifier, (P) *Alpha SDA*, SDA-124, SDA-132; (P) *VAX SDA*, SDA-141, SDA-153
- Channel request blocks
 - See CRBs
- Channels, (S) *DECnet Mgmt*, 1-4, 1-7, 8-11; (P) *Concepts*, 2-10
 - assigning for logical link, (S) *DECnet Mgmt*, 8-11, 8-20, 8-32
 - assigning I/O, (P) *Concepts*, 9-11
 - canceling I/O, (P) *Sys Svc I*, SYS1-77
 - deassigning, (P) *Concepts*, 9-24
 - deassignment of, (S) *DECnet Mgmt*, 8-14, 8-19
 - definition, (S) *VMScluster Sys*, F-4
 - established and implemented by PEDRIVER, (S) *VMScluster Sys*, F-4
 - _NET:, (S) *DECnet Mgmt*, 8-25
 - network, (S) *Sys Mgr Tuning*, 21-5
- Characteristics of created condition variable
 - specifying, (P) *DECthreads*, pthread-24
- Characteristics of created object
 - specifying, (P) *DECthreads*, pthread-3, cma-11
- Character-oriented output, (P) *SMG\$*, 2-8
- Characters
 - alphanumeric, (G) *User*, 14-8
 - nonprintable, (G) *User*, 14-8
 - special, (G) *User*, 14-8
 - terminator set for, (P) *I/O User*, 5-30
- Character set description (charmap) file
 - components, (G) *V6.2 New Feat*, 5-45
 - descriptions of, (G) *V6.2 New Feat*, 5-42 to 5-47
- Character sets
 - See also ASCII character set and DEC Multinational character set
 - ASCII, (G) *User*, B-1
 - DEC Multinational, (G) *User*, B-3
 - terminal lowercase, (P) *I/O User*, 5-21
 - translation of, (P) *LIB\$*, LIB-304
- Character string routines, (P) *Concepts*, 6-14
- Character strings, (P) *Interfaces*, B-3
 - See also Strings
 - and symbols, (G) *User*, 14-8
 - as literal text, (G) *User*, 16-9
 - comparing, (G) *User*, 14-11
 - converting to integer values, (G) *User*, 14-25, 14-26
 - converting using lexical functions, (G) *User*, 17-17
 - defining, (G) *User*, 14-9
 - evaluation of, (G) *User*, 14-24
 - examining with lexical functions, (G) *User*, 17-13
 - expressions
 - in symbols, (G) *User*, 14-9
 - operands, (G) *User*, 14-10
 - extracting with lexical functions, (G) *User*, 17-13, 17-14
 - finding in files, (G) *DCL N-Z*, DCLII-74
 - forcing symbol substitutions in, (G) *User*, 16-10
 - operations, (G) *User*, 14-10
 - quotation marks (" ") in, (G) *User*, 16-10

Character strings (cont'd)

- replacing, (G) *User*, 14-12, 14-13
- specifying case for search, (G) *DCL N-Z*, DCLII-74

- symbol assignment, (G) *DCL A-M*, DCLI-5
- with lexical functions, (G) *User*, 17-12

Character string translation routines, (P) *Concepts*, 6-14

char_string data type, (P) *Interfaces*, B-3

Checklist

- application compatibility in mixed-architecture VMScluster system, (G) *Compatibility*, 4-18

Checkpointing RSX-11S tasks, (S) *DECnet Mgmt*, 4-18

/CHECK qualifier, (P) *File Appl*, 10-1

Check report, (P) *File Appl*, 10-1, 10-5

CHECK_FEEDBACK mode, (S) *Sys Mgmt Util* A-L, 6-8

CHF

- See Condition Handling Facility

\$CHFDEF2 macro, (P) *Concepts*, 13-27

\$CHFDEF macro, (P) *Concepts*, 13-27

\$CHKPRO system service

- role in access control, (S) *Security*, 4-11

Choosing data categories, (S) *DECcmds*, 2-5

CI (computer interconnect), (G) *SW Overview*, 1-6; (S) *DECnet Intro*, 1-8

- as DECnet line, (S) *DECnet Mgmt*, 5-11

- as VAXcluster connector, (S) *DECnet Mgmt*, 1-10

- as VAXcluster data link, (S) *DECnet Mgmt*, 1-10, 2-21

- cable, (S) *DECnet Mgmt*, 1-10

- cable repair, (S) *VMScluster Sys*, C-26

- changing to a mixed-interconnect, (S) *VMScluster Sys*, 8-23

- circuit, (S) *DECnet Mgmt*, 2-6

- circuit device, (S) *DECnet Mgmt*, 2-10

- communication path, (S) *VMScluster Sys*, C-20

computers

- adding, (S) *VMScluster Sys*, 8-9

- failure to boot, (S) *VMScluster Sys*, C-4

- failure to join the cluster, (S) *VMScluster Sys*, C-13

- configurations, (S) *Dependable*, 6-15; (S) *VMScluster Sys*, 3-1; (S) *DECnet Mgmt*, 1-3

- configuring multiple adapters, (S) *VMScluster Sys*, 3-3

- connection, (S) *DECnet Intro*, 3-9

- controller, (S) *DECnet Mgmt*, 2-10

- data link between cluster nodes, (S) *Sys Mgr Tuning*, 21-8

- device-attention entry, (S) *VMScluster Sys*, C-28

- driver, (S) *DECnet Mgmt*, 2-10

- end node, (S) *DECnet Mgmt*, 2-21

CI (computer interconnect) (cont'd)

- end node backup circuit, (S) *DECnet Mgmt*, 2-21, 3-55

error log entry

- formats, (S) *VMScluster Sys*, C-27

- error-log entry, (S) *VMScluster Sys*, C-33

- analyzing, (S) *VMScluster Sys*, C-27

- error recovery, (S) *VMScluster Sys*, C-29, C-44

- line, (S) *DECnet Mgmt*, 2-11

- line device, (S) *DECnet Mgmt*, 2-14

- logged-message entry, (S) *VMScluster Sys*, C-31

- MSCP server accesses shadow sets, (S) *VMScluster Sys*, 6-24

- node addressing, (S) *DECnet Mgmt*, 3-26

- not supported for DECnet on Alpha systems, (S) *Comparison*, 6-4

port

- loopback datagram facility, (S) *VMScluster Sys*, C-22

- polling, (S) *VMScluster Sys*, C-19

- verifying function, (S) *VMScluster Sys*, C-21

- router, (S) *DECnet Mgmt*, 2-21

- troubleshooting, (S) *VMScluster Sys*, C-1

CI-750 device, (S) *DECnet Mgmt*, 2-10

CI-780 device, (S) *DECnet Mgmt*, 2-10

CIBCA device, (S) *DECnet Mgmt*, 2-10

CIBCI device, (S) *DECnet Mgmt*, 2-10

CIF option, (P) *Rec Mgmt Util*, 4-18

Circuit-level loopback tests, (S) *DECnet Mgmt*, 7-1

- LAN (local area network), (S) *DECnet Mgmt*, 7-9

Circuit level redundancy, (S) *Dependable*, 4-4

Circuits, (S) *DECnet Intro*, 1-2; (S) *DECnet Mgmt*, 1-1, 1-17

- access control, (S) *DECnet Intro*, 3-37

- asynchronous DDCMP devices, (S) *DECnet Mgmt*, 2-12, 5-12

- CI, (S) *DECnet Mgmt*, 2-6

- clearing counters, (S) *DECnet Mgmt Util*, 3-159

- commands, (S) *DECnet Mgmt*, 3-24

- cost, (S) *DECnet Intro*, 1-3; (S) *DECnet Mgmt*, 2-22, 3-51

- counters, (S) *DECnet Mgmt*, 3-35; (S) *DECnet Mgmt Util*, 3-159, B-1, B-4

- database, (S) *DECnet Mgmt*, 3-1

- DDCMP, (S) *DECnet Mgmt*, 1-8, 2-6, 3-26

- definition, (S) *DECnet Mgmt*, 2-6

- detecting failure, (S) *DECnet Intro*, 4-2

- determining cost, (S) *DECnet Mgmt*, 3-51

- determining status, (S) *DECnet Intro*, 4-2

- device name, (S) *DECnet Mgmt*, 3-24

- devices, (S) *DECnet Mgmt Util*, A-1

- displaying counter information with NCP, (S) *DECnet Intro*, 4-1

Circuits (cont'd)

- dynamic asynchronous, (S) *DECnet Mgmt*, 2-8
 - Ethernet, (S) *DECnet Mgmt*, 1-4, 3-26
 - FDDI, (S) *DECnet Mgmt*, 3-26
 - identification, (S) *DECnet Mgmt*, 3-24, 3-26
 - identifier, (S) *DECnet Intro*, 3-33
 - information, (S) *DECnet Mgmt Util*, 3-120
 - LAN, (S) *DECnet Mgmt*, 2-6, 3-26
 - logging failures, (S) *DECnet Intro*, 4-4
 - loopback test, (S) *DECnet Intro*, 4-7; (S) *DECnet Mgmt*, 7-6
 - multiaccess, (S) *DECnet Mgmt*, 2-7
 - multipoint control, (S) *DECnet Mgmt*, 2-6
 - multipoint tributary, (S) *DECnet Mgmt*, 2-6
 - name, (S) *DECnet Mgmt*, 2-7
 - network, (S) *Sys Mgr Tuning*, 21-5
 - definition, (S) *Sys Mgr Tuning*, 21-4
 - parameters, (S) *DECnet Mgmt*, 3-26
 - point-to-point, (S) *DECnet Mgmt*, 2-6
 - polling, (S) *DECnet Mgmt*, 3-31
 - service, (S) *DECnet Mgmt*, 4-2
 - service operations, (S) *DECnet Mgmt*, 3-29
 - setting base priority, (S) *DECnet Mgmt*, 3-32
 - states, (S) *DECnet Mgmt*, 2-7, 3-28; (S) *DECnet Mgmt Util*, C-1 to C-4
 - static asynchronous, (S) *DECnet Mgmt*, 1-9
 - synchronous DDCMP, (S) *DECnet Mgmt*, 1-3, 2-7, 2-12
 - testing, (S) *DECnet Mgmt Util*, 3-31, 3-49, 3-111
 - timers, (S) *DECnet Mgmt*, 3-29
 - transitions, (S) *DECnet Mgmt Util*, C-1 to C-4
 - types, (S) *DECnet Mgmt*, 3-26
 - verification, (S) *DECnet Mgmt*, 3-30
 - virtual, (S) *DECnet Mgmt*, 1-4, 1-8
- Circuits and line devices, (S) *DECnet Mgmt Util*, A-1
- DMB, (S) *DECnet Mgmt Util*, A-2
 - DMF, (S) *DECnet Mgmt Util*, A-2
 - DPV, (S) *DECnet Mgmt Util*, A-2
 - DSB, (S) *DECnet Mgmt Util*, A-2
 - DSV, (S) *DECnet Mgmt Util*, A-2
 - DSW, (S) *DECnet Mgmt Util*, A-2
 - DUP, (S) *DECnet Mgmt Util*, A-2
 - FZA, (S) *DECnet Mgmt*, 2-11; (S) *DECnet Mgmt Util*, A-2
 - KMV, (S) *DECnet Mgmt Util*, A-2
 - KMX, (S) *DECnet Mgmt Util*, A-2
 - KMY, (S) *DECnet Mgmt Util*, A-2
 - MFA, (S) *DECnet Mgmt*, 2-11; (S) *DECnet Mgmt Util*, A-2
- CIRCUITS class
- adding, (S) *Sys Mgmt Util M-Z*, 4-12
 - fields belonging to, (S) *Sys Mgmt Util M-Z*, 4-19
 - removing, (S) *Sys Mgmt Util M-Z*, 4-40

- Circuit timer, (S) *Sys Mgmt Util A-L*, 13-27
- Circumflex (^), (P) *Debugger*, 8-8, 8-13, B-6
- CISC architecture, (G) *Compatibility*, 1-9
- C language
 - See C
- Class driver data blocks
 - See CDDBs
- Classes, (S) *DECamds*, 5-9 to 5-10
 - enabling and disabling, (S) *Sys Mgr Tuning*, 18-23
- SHOW CLUSTER, (S) *Sys Mgmt Util M-Z*, 4-3
- Class of data
 - in SHOW CLUSTER, (S) *Sys Mgr Tuning*, 20-4
 - removing, (S) *Sys Mgr Tuning*, 20-11
- Class scheduler processes, (P) *Sys Svc II*, SYS2-234
- CLEANUP.COM command procedure, (G) *User*, 15-19
- Clean-up operations, (G) *User*, 15-18
- Cleanup routine
 - establishing, (P) *DECthreads*, pthread-23
 - executing, (P) *DECthreads*, pthread-22
- Clean-up tasks
 - in command procedures, (G) *User*, 15-16
- CLEAR CIRCUIT command, (S) *DECnet Mgmt Util*, 3-2
- CLEAR command, (S) *DECnet Intro*, 3-10
 - NCP, (S) *Sys Mgr Tuning*, 21-11
 - to delete configuration database entries, (S) *DECnet Intro*, 3-34
- CLEAR DEVICE command
 - in LANCP utility, (S) *Sys Mgmt Util A-L*, 12-8
- CLEAR EXECUTOR command, (S) *DECnet Mgmt*, 3-14; (S) *DECnet Mgmt Util*, 3-6
- CLEAR EXECUTOR NODE command, (S) *DECnet Mgmt Util*, 3-11
- Clearing an event flag, (P) *Sys Svc I*, SYS1-109
- CLEAR LINE command, (S) *DECnet Mgmt Util*, 3-12
- CLEAR LOGGING command, (S) *DECnet Mgmt Util*, 3-16
- CLEAR LOGGING EVENTS command, (S) *DECnet Mgmt Util*, 3-17
- CLEAR LOGGING NAME command, (S) *DECnet Mgmt Util*, 3-19
- CLEAR MODULE X25-ACCESS command, (S) *DECnet Mgmt Util*, 3-21
- CLEAR MODULE X25-PROTOCOL command, (S) *DECnet Mgmt Util*, 3-22
- CLEAR MODULE X25-SERVER command, (S) *DECnet Mgmt Util*, 3-25
- CLEAR MODULE X29-SERVER command, (S) *DECnet Mgmt Util*, 3-25
- CLEAR MOPDLL command
 - in LANCP utility, (S) *Sys Mgmt Util A-L*, 12-9

- CLEAR NODE CIRCUIT command, (S) *DECnet Mgmt Util*, 3-31
- CLEAR NODE command, (S) *DECnet Mgmt*, 3-14, 7-4; (S) *DECnet Mgmt Util*, 3-27 in LANCP utility, (S) *Sys Mgmt Util A-L*, 12-9
- CLEAR OBJECT command, (S) *DECnet Mgmt Util*, 3-32
- CLI\$DCL_PARSE routine, (P) *Util Routines*, CLI-5
- CLI\$DISPATCH routine, (P) *Util Routines*, CLI-8
- CLI\$GET_VALUE routine, (P) *Util Routines*, CLI-9
- CLI\$PRESENT routine, (P) *Util Routines*, CLI-12
- CLI (command language interpreter), (P) *Concepts*, 6-2
- CLI access routine, (P) *Concepts*, 6-2
- Client, (S) *TCP/IP*, 1-2
- Clients, (G) *SW Overview*, 2-7, 6-17; (P) *Environment*, 3-2; (P) *DECthreads*, 1-4
- PATHWORKS, (G) *SW Overview*, 6-18
- to OpenVMS distributed servers, (G) *SW Overview*, 7-2
- Client/server paradigm, (S) *Dependable*, 8-16
- Client/server computing, (G) *SW Overview*, 1-5, 2-7; (S) *TCP/IP*, 1-2, 3-1; (P) *Environment*, 3-2
- development environment support, (P) *Environment*, 1-5
- graphics and windowing, (P) *Environment*, 2-6
- in multivendor environments, (G) *SW Overview*, 6-17
- in production systems environments, (G) *SW Overview*, 7-2
- NAS support for, (G) *SW Overview*, 6-9
- CLI routines, (P) *Util Routines*, CLI-1
- example in a Fortran program, (P) *Util Routines*, CLI-2
- list of, (P) *Util Routines*, CLI-1
- when to use, (P) *Util Routines*, CLI-1
- CLI symbols, (P) *LIB\$*, LIB-378
- deleting, (P) *LIB\$*, LIB-121
- getting value of, (P) *LIB\$*, LIB-245
- RTL routines, (P) *LIB\$*, LIB-121, LIB-245
- /CLITABLES qualifier, (S) *Security*, 7-9, 8-27
- Clocks
- setting system, (P) *Concepts*, 5-11
- clog routine, (P) *Portable Math*, DPML-18, B-4
- CLOSE command, (G) *DCL A-M*, DCLI-58, DCLI-59
- for remote file, (S) *DECnet Intro*, 2-13
- in network operations, (S) *DECnet Intro*, 2-13
- Closed queue status, (S) *Sys Mgr Essentials*, 13-51
- CLOSE LOG command
- in LMCP, (S) *Sys Mgmt Util A-L*, 14-5
- Close service, (P) *RMS Ref*, 3-1, A-12, A-15
- condition values, (P) *RMS Ref*, RMS-5
- See also Completion status codes
- contrasted with Disconnect service, (P) *RMS Ref*, 3-5
- control block input fields, (P) *RMS Ref*, RMS-4
- control block output fields, (P) *RMS Ref*, RMS-5
- limitations with XABs, (P) *RMS Ref*, RMS-4
- use restrictions, (P) *RMS Ref*, RMS-4
- Closing a queue, (S) *Sys Mgr Essentials*, 13-53
- CLUBs (cluster blocks), (P) *Alpha SDA*, SDA-81; (P) *VAX SDA*, SDA-87
- CLUDCBs (cluster quorum disk control blocks), (P) *Alpha SDA*, SDA-81; (P) *VAX SDA*, SDA-87
- CLUE
- See Crash Log Utility Extractor
- CLUE\$SITE_PROC logical name, (P) *Alpha SDA*, SDA-171
- CLUE (Crash Log Utility Extractor) commands, (S) *Comparison*, 3-9
- CLUE CLEANUP command, (P) *Alpha SDA*, SDA-163
- CLUE commands
- archiving information, (P) *Alpha SDA*, SDA-6
- CLUE CONFIG command, (P) *Alpha SDA*, SDA-164
- CLUE CRASH command, (P) *Alpha SDA*, SDA-19, SDA-166
- CLUE ERRLOG command, (P) *Alpha SDA*, SDA-169
- CLUE HISTORY command, (P) *Alpha SDA*, SDA-170
- CLUE MCHK command, (P) *Alpha SDA*, SDA-172
- CLUE MEMORY command, (P) *Alpha SDA*, SDA-173
- CLUE PROCESS command, (P) *Alpha SDA*, SDA-180
- CLUE STACK command, (P) *Alpha SDA*, SDA-182
- CLUE VCC command, (P) *Alpha SDA*, SDA-186
- CLUEXIT bugcheck
- diagnosing, (S) *VMScluster Sys*, C-18
- CLUE XQP command, (P) *Alpha SDA*, SDA-188
- CLUFEBs (cluster failover control blocks), (P) *Alpha SDA*, SDA-81; (P) *VAX SDA*, SDA-87
- CLUSTER= option, (P) *Linker*, LINK-47
- basing images, (P) *Linker*, LINK-43
- controlling image section creation, (P) *Linker*, 3-22
- controlling the order of input file processing, (P) *Linker*, 2-17
- fixing position of transfer vector in image, (P) *Linker*, 4-7

- Cluster-accessible disks, (G) *SW Overview*, 3-18
 - served by MSCP, (S) *VMScluster Sys*, 6-15
- Cluster-accessible tapes, (G) *SW Overview*, 3-18
 - served by TMSCP, (S) *VMScluster Sys*, 6-15
- Cluster aliases
 - See also DECnet, cluster aliases
 - defining, (S) *VMScluster Sys*, 4-9, 4-10
 - enabling operations, (S) *VMScluster Sys*, 4-11
 - limits, (S) *VMScluster Sys*, 9-21
 - supported with DECnet on Alpha systems, (S) *Comparison*, 6-1
 - supported with DECnet on OpenVMS Alpha systems, (G) *Compatibility*, 2-6
- CLUSTER class
 - adding, (S) *Sys Mgmt Util M-Z*, 4-13
 - fields belonging to, (S) *Sys Mgmt Util M-Z*, 4-20
 - removing, (S) *Sys Mgmt Util M-Z*, 4-41
- CLUSTER class record
 - in Monitor utility, (S) *Sys Mgmt Util M-Z*, A-11
- Cluster event notification
 - system services, (P) *Environment*, 10-5, 10-7
- Cluster events
 - clearing request for notification of, (P) *Sys Svc I*, SYS1-107
 - requesting notification of, (P) *Sys Svc II*, SYS2-237
- Cluster failover control blocks
 - See CFCBs
- Cluster hung, (S) *DECcmds*, 4-2
- CLUSTER information
 - SHOW CLUSTER class of data, (S) *Sys Mgmt Util M-Z*, 4-3
- Clustering of input files
 - controlling image section creation, (P) *Linker*, 3-22
 - effect on image creation, (P) *Linker*, 3-9
 - in a based image, (P) *Linker*, LINK-43
 - processing based images, (P) *Linker*, 3-9
 - using the COLLECT= option, (P) *Linker*, LINK-48
- Cluster management code
 - global symbols, (P) *VAX SDA*, SDA-64
- /CLUSTER qualifier
 - in Mount utility, (S) *Sys Mgmt Util M-Z*, 2-14
- Clusters, (P) *File Appl*, 1-5
 - See also Clustering of input files, VAXcluster environments, and VMScluster systems
- Cluster system blocks
 - See CSBs
- Cluster system identification number
 - See CSID
- Clusterwide process services, (S) *VMScluster Sys*, 1-9
- CLUSTER_AUTHORIZE.DAT files, (S) *Security*, 11-7; (S) *Sys Mgmt Util M-Z*, 6-15, 6-18; (S) *VMScluster Sys*, 2-14
 - setting group number and password, (S) *VMScluster Sys*, 10-16
- CLUSTER_CONFIG.COM command procedure, (S) *Sys Mgr Essentials*, 5-6; (S) *Sys Mgr Tuning*, 20-2; (S) *Sys Mgmt Util M-Z*, 6-15
 - adding a quorum disk, (S) *VMScluster Sys*, 8-18
 - change options, (S) *VMScluster Sys*, 8-21
 - compared to VMSKITBLD.COM command procedure, (S) *Sys Mgr Essentials*, 2-31
 - converting standalone computer to cluster computer, (S) *VMScluster Sys*, 8-25
 - creating a duplicate system disk, (S) *VMScluster Sys*, 8-31
 - creating SATELLITE_PAGE.COM command procedure, (S) *Sys Mgr Tuning*, 15-20
 - disabling a quorum disk, (S) *VMScluster Sys*, 8-21
 - enabling disk server, (S) *VMScluster Sys*, 6-15, 8-26
 - enabling tape server, (S) *VMScluster Sys*, 8-29
 - functions, (S) *VMScluster Sys*, 8-1
 - modifying satellite LAN hardware address, (S) *VMScluster Sys*, 8-22
 - preparing to execute, (S) *VMScluster Sys*, 8-4
 - removing computers, (S) *VMScluster Sys*, 8-18
 - required information, (S) *VMScluster Sys*, 8-5
 - setting up LAN MOP, (G) *V6.2 New Feat*, 6-29; (S) *Sys Mgr Tuning*, 22-21
 - system files created for satellites, (S) *VMScluster Sys*, 8-1
 - use in adding a system to a VMScluster, (S) *Sys Mgr Essentials*, 2-31
- CLUSTER_CONFIG_LAN.COM command procedure, (G) *V6.2 New Feat*, 6-29
- CLUSTER_SERVER process
 - creation during system startup, (S) *Sys Mgr Essentials*, 5-5
- CLUSTER_SIZE attribute, (S) *Sys Mgr Essentials*, 10-57; (P) *Rec Mgmt Util*, 4-18
- CLUSTERLOA.STB file, (P) *VAX SDA*, SDA-64
- CLUSTERLOA symbol, (P) *VAX SDA*, SDA-17
- cma.h, (P) *DECthreads*, B-2
- cma_debug, (P) *DECthreads*, cma-39, B-3
- cma_t_once data structure, (P) *DECthreads*, cma-55
- CMEXEC privilege, (S) *Security*, A-4
- CMKRNL privilege, (S) *Security*, A-4; (S) *DECnet Mgmt*, 5-1
- CMS, (G) *SW Overview*, 4-9, 6-15; (P) *Environment*, 6-1
 - tracking source code changes, (S) *Dependable*, 8-58

- cmul routine, (P) *Portable Math*, DPML-19, B-4
- CNDRIVER DECnet driver
 - using over a CI, (S) *DECnet Mgmt*, 5-3, 5-11
- COBOL, (G) *Compatibility*, 1-10; (P)
 - Environment*, 7-2, 7-6
 - calling CONVERT routines from, (P) *File Appl*, 4-29
 - calling FDL\$CREATE from, (P) *File Appl*, 4-17
 - data type declarations, (P) *Interfaces*, B-30
 - DEC COBOL, (G) *SW Overview*, 4-6
 - implementation table, (P) *Interfaces*, B-30
 - VAX COBOL, (G) *SW Overview*, 4-5
- COBOL compiler
 - generating nonreentrant code, (P) *DECthreads*, 3-4
- Code
 - See also Address expressions and Instructions
 - AST-reentrant, (P) *Modular Proc*, 3-15
 - fully-reentrant, (P) *Modular Proc*, 3-15
 - writing AST-reentrant procedures, (P) *Modular Proc*, 3-16
- \$CODE\$ program section name
 - definition, (P) *Linker*, B-16
- Code Management System
 - See CMS
- Code sharing
 - overview, (S) *VAX Perform*, 1-4
- Coding guidelines, (P) *Modular Proc*, 3-1
- COHESION, (S) *Dependable*, 8-58
 - support services from Digital, (S) *Dependable*, 10-2
 - writing custom applications, (S) *Dependable*, 3-8
- COLLATE key type, (P) *Rec Mgmt Util*, 4-29
- Collating key
 - stored order versus lookup value, (P) *RMS Ref*, 6-3, 6-4
- Collating key data type, (P) *RMS Ref*, 12-6
- Collating sequences
 - potential problem with, (P) *Rec Mgmt Util*, 2-1
- COLLATING_SEQUENCE attribute, (P) *Rec Mgmt Util*, 4-26
- COLLECT= option, (P) *Linker*, LINK-48
 - controlling image section creation, (P) *Linker*, 3-22
 - controlling the order of input file processing, (P) *Linker*, 2-18
- Collecting data, (S) *DECamds*, 2-5, 5-2
 - recommendations to handle heavy workloads, (S) *DECamds*, 5-15
- Collection
 - See Data collection
- Collection intervals, (S) *DECamds*, 5-2 to 5-17, Glossary-1
- Collection points
 - for network events, (S) *DECnet Intro*, 4-4
- Collect menu, (S) *DECamds*, 2-5
- Collided page (COLPG) wait state, (S) *Alpha Perform*, 9-4
- Collision detects
 - Ethernet, (S) *DECnet Mgmt*, 1-5
- Colon (:)
 - range delimiter, (P) *Debugger*, 8-17, 15-4, 15-6, 15-7
- Combination model, (P) *DECthreads*, 1-6
- Combination time
 - rules for entering, (G) *User*, 3-13
 - syntax, (G) *User*, 3-13
- Command Definition utility (CDU), (G) *SW Overview*, 4-8, 4-17; (P) *Environment*, 4-1
 - invoking, (G) *DCL N-Z*, DCLII-113
- Command files
 - LAN Control Program (LANCP) utility, (G) *V6.2 New Feat*, 6-26; (S) *Sys Mgr Tuning*, 22-9
- Command formats
 - debugger, (P) *Debugger*, 6-1
 - for backups, (S) *Sys Mgr Essentials*, 10-4
 - for image backups, (S) *Sys Mgr Essentials*, 10-31, 10-32
 - for incremental backups, (S) *Sys Mgr Essentials*, 10-34, 10-35
 - for multiple backup output devices, (S) *Sys Mgr Essentials*, 10-24, 10-32, 10-33
- Command interface
 - debugger, (P) *Debugger*, 5-1
 - with DECwindows Motif, (P) *Debugger*, 1-2, 1-13, 2-8, 2-9, 5-14
- Command interpreters
 - commands performed in, (G) *User*, 16-11
 - controlling error checking of, (G) *DCL N-Z*, DCLII-175
 - specifying alternate, (G) *DCL A-M*, DCLI-410
 - symbol table, (S) *Sys Mgmt Util M-Z*, C-11
- Command language interpreter
 - See CLI
- Command language routines
 - See also CLI routines
- Command levels
 - definition, (G) *User*, 15-29
 - with SET [NO]ON command, (G) *User*, 15-34
- Command lines
 - deleting characters, (G) *User*, 3-17
 - editing, (G) *User*, 3-16
 - including in command procedures, (G) *User*, 15-3
 - in Mail, (G) *User*, 6-3
 - in Phone, (G) *User*, 7-3
 - recalling, (G) *User*, 3-14
 - wrapping, (G) *User*, 3-17
- Command mode for Audit Analysis utility
 - manipulating the display interactively, (S) *Sys Mgmt Util A-L*, 4-10, 4-25

Command procedures, (G) *SW Overview*, 5-4; (G) *Compatibility*, 1-2; (S) *DECnet Mgmt*, 8-4, 8-39; (P) *File Appl*, 1-32

See also Login command procedures, Network command procedures, and System command procedures

access control strings, (G) *User*, 19-7

assigning variables, (G) *User*, 15-9

BATCH.COM, (G) *User*, C-27

building, (S) *Sys Mgmt Util M-Z*, 4-48

CALC.COM, (G) *User*, C-25

canceling with Ctrl/Y, (G) *User*, 15-34

changing verification settings, (G) *User*, 17-4

CLEANUP.COM, (G) *User*, 15-19

clean-up tasks, (G) *User*, 15-16, 15-18

closing files, (G) *User*, 15-17

comments, (G) *User*, 15-5

COMPILE_FILE.COM, (G) *User*, C-31

completing, (G) *User*, 15-18

continuing execution of, (G) *DCL A-M*, DCLI-63

control for SHOW CLUSTER output, (S) *Sys Mgmt Util M-Z*, 4-4

controlling error checking in, (G) *DCL N-Z*, DCLII-175

CONVERT.COM, (G) *User*, C-1

coordinating, (S) *VMScluster Sys*, 5-7

correcting system time, (S) *Sys Mgmt Util M-Z*, 6-17

creating, (G) *User*, 15-3; (S) *VMScluster Sys*, 5-8

DCL commands to access remote files, (S) *DECnet Intro*, 2-13

debugger, (P) *Debugger*, 12-1

debugging, (G) *User*, 15-14

 SET PREFIX command, (G) *User*, 15-15

 SET VERIFY command, (G) *User*, 15-15

 SHOW SYMBOL command, (G) *User*, 15-15

default directory for, (P) *Debugger*, 12-2

default file type of, (G) *User*, 15-3

definition, (G) *User*, 15-1

delaying process of, (G) *DCL N-Z*, DCLII-426

deleting files, (G) *User*, 15-17

designing, (G) *User*, 15-8

detecting errors, (G) *User*, 15-41

determining conditionals, (G) *User*, 15-8

determining variables, (G) *User*, 15-8

DIR.COM, (G) *User*, C-9

disabling verification settings, (G) *User*, 17-4

displaying command lines of, (G) *DCL N-Z*, DCLII-232

displaying commands in, (P) *Debugger*, 12-2

displaying prompts of, (G) *DCL A-M*, DCLI-273

dollar signs (\$), (G) *User*, 15-4

duplicate labels, (G) *User*, 15-5

EDITALL.COM, (G) *User*, C-15

Command procedures (cont'd)

enabling verification during execution, (G) *User*, 15-16

ending, (G) *User*, 15-13

error handling, (G) *User*, 15-30

 SET NOON command, (G) *User*, 15-33

example for task-to-task operations, (S) *DECnet Mgmt*, 8-39

executing, (G) *User*, 15-21; (G) *DCL A-M*, DCLI-8; (S) *Sys Mgmt Util A-L*, 12-7; (S) *Sys Mgmt Util M-Z*, 4-11; (S) *VMScluster Sys*, 5-8; (P) *Debugger*, 12-1

as batch jobs, (G) *User*, 15-24

as remote batch jobs, (G) *User*, 15-25

from within other command procedures, (G) *User*, 15-21

in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-9

interactively, (G) *User*, 15-23

on private disks, (G) *User*, 15-27

on remote nodes, (G) *User*, 15-21

on tape volumes, (G) *User*, 15-27

redirecting interactive output, (G) *User*, 15-24

restarting batch jobs, (G) *User*, 15-25

with automatic foreign commands, (G) *User*, 14-38

without using symbols, (G) *User*, 14-38

executing at system startup, (S) *Sys Mgmt Util M-Z*, 6-66

executing DCL commands with DO, (S) *Sys Mgmt Util M-Z*, 6-30

executing in SYSMAN, (S) *Sys Mgr Essentials*, 2-18

executing with SYSMAN DO command, (S) *Sys Mgr Essentials*, 2-18

EXIT command, (G) *User*, 15-13, 15-29

exiting, (G) *User*, 15-29

for backups, (S) *Sys Mgr Essentials*, 10-36

for image backups, (S) *Sys Mgr Essentials*, 10-36

for incremental backups, (S) *Sys Mgr Essentials*, 10-38

for installing products, (S) *Sys Mgr Essentials*, 3-32

for interactive backups, (S) *Sys Mgr Essentials*, 10-39

for MONITOR

 archiving recording and summary files, (S) *Sys Mgr Tuning*, 18-39

 creating cluster summaries, (S) *Sys Mgr Tuning*, 18-40

 creating summary file, (S) *Sys Mgr Tuning*, 18-39

 generating clusterwide multifile summary reports, (S) *Sys Mgr Tuning*, 18-39

 initiating continuous recording, (S) *Sys Mgr Tuning*, 18-41

Command procedures

for MONITOR (cont'd)

- invoking SUBMON.COM from startup, (S) *Sys Mgr Tuning*, 18-39
- MONITOR.COM, (S) *Sys Mgr Tuning*, 18-39
- MONSUM.COM, (S) *Sys Mgr Tuning*, 18-39
- rerecording monitoring, (S) *Sys Mgr Tuning*, 18-39
- starting MONITOR.COM as a detached process, (S) *Sys Mgr Tuning*, 18-39
- SUBMON.COM, (S) *Sys Mgr Tuning*, 18-39
- for object, (S) *DECnet Mgmt*, 3-61
- for POLYCENTER Software Installation utility, (S) *Sys Mgr Essentials*, 3-18
- for remote batch execution, (S) *DECnet Intro*, 2-12, 2-13
- for remote file access, (S) *DECnet Intro*, 2-12
- for running remote task, (S) *DECnet Intro*, 2-12, 2-14
- for SHOW CLUSTER, (S) *Sys Mgr Tuning*, 20-15
 - controlling output, (S) *Sys Mgr Tuning*, 20-5
 - default file type, (S) *Sys Mgr Tuning*, 20-16
 - description, (S) *Sys Mgr Tuning*, 20-16
 - formatting reports, (S) *Sys Mgr Tuning*, 20-10
 - initialization, (S) *Sys Mgr Tuning*, 20-14
- SHOW_CLUSTER\$INIT.COM, (S) *Sys Mgr Tuning*, 20-14
- for starting object, (S) *DECnet Mgmt*, 8-39
- for system management (overview), (S) *Sys Mgr Essentials*, 2-5
- for system startup, (S) *Sys Mgr Essentials*, 2-11
- FORTUSER.COM, (G) *User*, C-19
- GETPARMS.COM, (G) *User*, C-13
- handling label errors, (G) *User*, 15-30
- identification, (S) *DECnet Mgmt*, 3-61
- IF command, (G) *User*, 15-10
 - including command lines, (G) *User*, 15-3
 - including DCL commands, (G) *User*, 15-3
 - including literal characters, (G) *User*, 15-10
- input, (G) *User*, 16-2
- interrupting with Ctrl/Y, (G) *User*, 15-34
- labels, (G) *User*, 15-4; (G) *DCL A-M*, DCLI-52, DCLI-227, DCLI-229
- LISTER.COM, (G) *User*, C-23
- log file as, (P) *Debugger*, 12-5
- login, (G) *User*, 15-45
- LOGIN.COM, (G) *User*, 18-14
- MAILEDIT.COM, (G) *User*, C-17
- nested

Command procedures

nested (cont'd)

- passing data to with parameters, (G) *User*, 16-5
- NETCONFIG.COM, (S) *DECnet Intro*, 2-16, 3-10, 3-11, 3-15, 3-32, 3-37, 4-5
 - dialog, (S) *DECnet Mgmt*, 5-7
- on cluster-accessible disks, (S) *VMScluster Sys*, 5-8
- order of DCL commands, (G) *User*, 15-9
- output, (G) *User*, 16-9
- parameters for, (G) *DCL A-M*, DCLI-8; (S) *Sys Mgmt Util A-L*, 12-7
- passing data to with parameters, (G) *User*, 16-3
- passing parameters to, (P) *Debugger*, 12-2
- passing symbols to interactively, (G) *DCL A-M*, DCLI-273
- personal login, (G) *User*, 15-45
 - in captive accounts, (G) *User*, 15-46
- program stubs, (G) *User*, 15-10
- prompting for user input in, (G) *User*, 16-6
- recreating displays with, (P) *Debugger*, 11-22
- redefining SYS\$INPUT for, (G) *User*, 16-5
- REMINDER.COM, (G) *User*, C-5
- replacing program stubs, (G) *User*, 15-19
- restoring defaults, (G) *User*, 15-17
- resuming execution of, (G) *DCL A-M*, DCLI-63
- saving defaults, (G) *User*, 15-17
- setting up storage media, (S) *Sys Mgr Essentials*, 8-46
 - disk volumes, (S) *Sys Mgr Essentials*, 8-46
 - tape volumes, (S) *Sys Mgr Essentials*, 8-46
- specifying in batch job, (G) *User*, 18-12
- STARTNET.COM, (S) *Security*, 12-16
- steps for writing, (G) *User*, 15-7
- STOP command, (G) *User*, 15-14
- stopping and returning to command level 0, (G) *DCL N-Z*, DCLII-383
- submitting as batch jobs, (G) *DCL N-Z*, DCLII-404
- SYLOGIN.COM, (G) *User*, 18-10
- SYS.COM, (G) *User*, C-11
- system startup on OpenVMS Alpha, (G) *Compatibility*, 1-6
- system startup on OpenVMS VAX, (G) *Compatibility*, 1-6
- terminating, (G) *DCL A-M*, DCLI-222
- testing, (G) *User*, 15-14
- testing a spooled printer, (S) *Sys Mgr Essentials*, 7-16
- testing conditionals, (G) *User*, 15-9
- testing expressions, (G) *DCL A-M*, DCLI-245
- THEN command, (G) *User*, 15-10
- to configure a DECnet network node, (S) *Sys Mgr Tuning*, 21-11
- to install software products
 - See VMSINSTAL.COM command procedure

- Command procedures (cont'd)
 - to run AUTOGEN regularly, (S) *Sys Mgr Tuning*, 14-22
 - to specify default state of operator log files, (S) *Sys Mgr Tuning*, 18-23
 - transferring control within, (G) *DCL A-M*, DCLI-52, DCLI-227, DCLI-229
 - types, (G) *User*, 15-1
 - using over the network, (S) *DECnet Intro*, 2-12
 - using variables, (G) *User*, 17-12
 - VVIEF\$INSTAL.COM procedure, (S) *Sys Mgr Tuning*, 26-5
 - writing, (G) *User*, 15-7
- Command prompting
 - See Prompts
- /COMMAND qualifier, (P) *Debugger*, 12-6
- Command qualifiers, (S) *DECcmds*, 2-1
- Commands
 - See also DCL commands
 - abbreviating, (G) *User*, 3-7
 - abbreviating in command procedures, (G) *User*, 3-7
 - binding to keys, customizing, (P) *Debugger*, 3-35
 - canceling, (G) *User*, 3-5
 - date formats, (G) *User*, 3-11
 - entering in Mail, (G) *User*, 6-2
 - executing on multiple nodes, (S) *Sys Mgr Essentials*, 2-18
 - executing on remote nodes, (S) *Sys Mgr Essentials*, 2-12
 - executing with SYSMAN DO command, (S) *Sys Mgr Essentials*, 2-18
 - for Analyze/RMS_File utility, (P) *File Appl*, 10-11
 - for the Edit/FDL utility, (P) *File Appl*, 4-3
 - recalling, (S) *Sys Mgmt Util A-L*, 13-23
 - SDA, (P) *VAX SDA*, SDA-15 to SDA-19
 - time formats, (G) *User*, 3-11
- Command strings
 - See also CLI routines
 - checking for presence of, (P) *Util Routines*, CLI-12
 - dispatching to action routine, (P) *Util Routines*, CLI-8
 - obtaining values, (P) *Util Routines*, CLI-9
 - parsing a DCL command string, (P) *Util Routines*, CLI-5
 - positional qualifiers, (P) *Util Routines*, CLI-13
 - processing with CLI routines, (P) *Util Routines*, CLI-1
 - prompting for input, (P) *Util Routines*, CLI-6
- Command syntax
 - See Syntax
- Command tables, using with CLI routines, (P) *Util Routines*, CLI-1, CLI-6
- Command terminals, (S) *DECnet Mgmt*, 8-1
- Command verification
 - using SET PREFIX, (G) *DCL N-Z*, DCLII-180
- Comment delimiters, (G) *DCL A-M*, DCLI-153; (P) *RMS Ref*, A-5
- /COMMENT qualifier
 - in Backup utility, (S) *Sys Mgmt Util A-L*, 7-22
 - in Mount utility, (S) *Sys Mgmt Util M-Z*, 2-15
- Comments
 - in command procedures, (G) *User*, 15-5
 - in distribution lists, (G) *User*, 6-7
 - in FDL files, (P) *Rec Mgmt Util*, 6-1
 - use of exclamation point (!), (G) *User*, 6-7
- Common areas, (P) *Concepts*, 2-6
 - per-process, (P) *Concepts*, 2-6
- Common blocks
 - aligning, (P) *Concepts*, 8-4
 - installing as a shared image, (P) *Concepts*, 17-6
 - interprocess, (P) *Concepts*, 17-6
 - modifying, (P) *Concepts*, 2-6
- Common Data Dictionary
 - See CDD/Repository
- Common-environment VMScluster systems
 - building startup procedures, (S) *VMScluster Sys*, 5-8
 - coordinating system files, (S) *VMScluster Sys*, 5-17
 - functions that must remain specific, (S) *VMScluster Sys*, 5-8
 - setting up, (S) *VMScluster Sys*, 5-2
- Common event flag (CEF) wait state, (S) *Alpha Perform*, 9-4
- Common event flag clusters, (P) *Concepts*, 14-18
 - as protected objects, (S) *Security*, 4-10
 - disassociating, (P) *Sys Svc I*, SYS1-168
 - events audited, (S) *Security*, 5-3
 - permanent, (P) *Concepts*, 14-20
 - privilege requirements, (S) *Security*, 5-3
 - reestablishing security profile, (S) *Security*, 5-3
 - security elements of, (S) *Security*, 5-2
 - system modifications of templates, (S) *Security*, 5-3
 - template profile, (S) *Security*, 5-3
 - temporary, (P) *Concepts*, 14-20
 - types of access, (S) *Security*, 5-2
- Common files
 - coordinating for multiple boot servers, (S) *VMScluster Sys*, 5-18
 - coordinating for multiple system disks, (S) *VMScluster Sys*, 5-18
 - moving off system disk, (S) *VMScluster Sys*, 9-15
 - NET\$PROXY.DAT, (S) *VMScluster Sys*, 5-13

Common files (cont'd)

- NETNODE_REMOTE.DAT, (S) *VMScluster Sys*, 5-19
- NETNODE_UPDATE.DAT, (S) *VMScluster Sys*, 5-19
- NETOBJECT.DAT, (S) *VMScluster Sys*, 5-13
- NETPROXY.DAT, (S) *VMScluster Sys*, 5-13, 5-17
- QMAN\$MASTER.DAT, (S) *VMScluster Sys*, 5-13
- RIGHTSLIST.DAT, (S) *VMScluster Sys*, 5-13, B-3
- SYSALF.DAT, (S) *VMScluster Sys*, 5-13
- system, (S) *VMScluster Sys*, 5-17
- SYSUAF.DAT, (S) *VMScluster Sys*, 5-14, 5-17, B-1
- SYSUAFALF.DAT, (S) *VMScluster Sys*, 5-16
- VMS\$AUDIT_SERVER.DAT, (S) *VMScluster Sys*, 5-12
- VMS\$OBJECTS.DAT, (S) *VMScluster Sys*, 5-16
- VMS\$PASSWORD_DICTIONARY.DATA, (S) *VMScluster Sys*, 5-16
- VMS\$PASSWORD_HISTORY.DAT, (S) *VMScluster Sys*, 5-16
- VMS\$PASSWORD_POLICY.EXE, (S) *VMScluster Sys*, 5-17
- VMSMAIL_PROFILE.DATA, (S) *VMScluster Sys*, 5-16
- Common language environment, (P) *Environment*, 7-1
- Common Object Request Broker Architecture
 - See CORBA
- Common source files, (P) *Modular Proc*, 3-6, A-4
- declarations, (P) *Modular Proc*, 3-6
- Common system disks
 - directory structure, (S) *VMScluster Sys*, 5-4
- Communicating
 - with operators, (S) *Sys Mgr Essentials*, 8-18
 - with users, (S) *Sys Mgr Essentials*, 8-18
 - creating systemwide announcements, (S) *Sys Mgr Essentials*, 5-14
- Communication mechanisms, (S) *VMScluster Sys*, 1-4
- Communications
 - analyzing options, (S) *Dependable*, 3-5 to 3-7
 - building block, (S) *Dependable*, 1-15 to 1-16
 - channel-formation problems, (S) *VMScluster Sys*, F-17
 - controller device, (S) *DECnet Intro*, 3-4
 - dependability characteristics, (S) *Dependable*, 7-1 to 7-12, 7-15 to 7-19
 - hardware, (S) *DECnet Intro*, 3-4
 - PEDRIVER, (S) *VMScluster Sys*, F-4
 - port, (S) *DECnet Intro*, 3-4
 - retransmission problems, (S) *VMScluster Sys*, F-18
 - SCS interprocessor, (S) *VMScluster Sys*, 1-4

Communications (cont'd)

- system network considerations, (S) *Dependable*, 3-7
- task-to-task, (S) *DECnet Intro*, 2-12; (S) *DECnet Mgmt*, 1-2, 1-17, 8-1
- troubleshooting NISCA, (S) *VMScluster Sys*, F-16
- Communications buffer, (S) *DECcmds*, 5-16
- Communications devices
 - C2 system requirements, (S) *Security*, C-6
 - default security elements, (S) *Security*, 5-6
- Communications line
 - definition, (S) *Sys Mgr Tuning*, 21-12
 - network
 - definition, (S) *Sys Mgr Tuning*, 21-4
- Communications pane, (P) *Debugger*, 1-8, 1-13
- Communications services
 - ATM, (G) *V6.2 New Feat*, 8-5
 - DS3, (G) *V6.2 New Feat*, 8-5
- Compact disc drives
 - supported by UETP, (S) *Sys Mgr Tuning*, 17-7
- Compact discs
 - See CD-ROMs
- Compaction of data
 - See Data record compaction
- Compare operations, (S) *Sys Mgmt Util A-L*, 7-23
- with BACKUP, (S) *Sys Mgr Essentials*, 10-25
- /COMPARE qualifier
 - in Backup utility, (S) *Sys Mgmt Util A-L*, 7-23
- Comparing
 - characters in records, (G) *DCL A-M*, DCLI-151
 - files, (G) *DCL A-M*, DCLI-151
- Comparing two handles, (P) *DECthreads*, cma-43
- Compatibility mode handlers, (P) *Concepts*, 13-12
- declaring, (P) *Sys Suc I*, SYS1-176
- Compatibility of images
 - mixing native and translated images, (G) *Compatibility*, 3-8
- Compilers, (G) *SW Overview*, 4-5; (G) *Compatibility*, 1-10
- alignment, (P) *Concepts*, 22-4
- architectural differences, (G) *Compatibility*, 4-6
- Bliss, (G) *Compatibility*, 1-10, 4-11
- compiler generated type, (P) *Debugger*, 8-4
- compiling for debugging, (P) *Debugger*, 5-5, 9-2
- /DEBUG qualifier, (P) *Debugger*, 5-5, 9-2, 10-1
- DEC Ada, (G) *Compatibility*, 1-10
- DEC BASIC, (G) *Compatibility*, 1-10
- DEC C, (G) *Compatibility*, 1-10
- DEC C++, (G) *Compatibility*, 1-10
- DEC COBOL, (G) *Compatibility*, 1-10
- DEC Fortran, (G) *Compatibility*, 1-10
- DEC OPS5, (G) *Compatibility*, 1-10
- DEC Pascal, (G) *Compatibility*, 1-10

Compilers (cont'd)

- DEC PL/I, (G) *Compatibility*, 1-10
- differences, (G) *Compatibility*, 4-4
- generating nonreentrant code, (P) *DECthreads*, 3-4
- generating reentrant code, (P) *DECthreads*, 3-4
- IDL, (G) *SW Overview*, 6-14
- /LIST qualifier, (P) *Debugger*, 10-1
- MACRO-32, (G) *Compatibility*, 1-10
- /NOOPTIMIZE qualifier, (P) *Debugger*, 5-5, 13-1
- PALcode built-ins, (G) *Compatibility*, 4-7
- use of LIB\$ESTABLISH, (G) *Compatibility*, 4-4
- COMPILE_FILE.COM command procedure, (G) *User*, C-31
- sample execution, (G) *User*, C-34
- Completion routines
 - conditions for AST execution, (P) *RMS Ref*, A-10
 - service macro arguments, (P) *RMS Ref*, A-10
- Completion status
 - showing for batch and print jobs, (S) *Sys Mgr Essentials*, 13-26
- Completion status code field, (P) *File Appl*, 5-12
 - as alternative to use of R0, (P) *RMS Ref*, 2-4
 - for signaling errors, (P) *RMS Ref*, 2-6
 - use with debugger, (P) *RMS Ref*, 2-8
- Completion status codes
 - description, (P) *RMS Ref*, 2-5
 - errors for inaccessible control block condition, (P) *RMS Ref*, 2-6
 - handling, (P) *RMS Ref*, A-11
 - listing conditions when not returned, (P) *RMS Ref*, 2-7
 - severity codes, (P) *RMS Ref*, 2-5
 - testing, (P) *RMS Ref*, 2-5
- Completion status value field
 - as alternative to use of R0, (P) *RMS Ref*, 2-4
 - for signaling errors, (P) *RMS Ref*, 2-6
 - use with debugger, (P) *RMS Ref*, 2-8
- Complex instruction set computers
 - See Architectures
- Complex numbers, (P) *MTH\$*, 1-3, MTH-56, MTH-58, MTH-111, MTH-121
 - absolute value of, (P) *MTH\$*, MTH-23
 - complex exponential of, (P) *MTH\$*, MTH-30, MTH-32
 - conjugate of, (P) *MTH\$*, MTH-43, MTH-44
 - cosine of, (P) *MTH\$*, MTH-26, MTH-28
 - division of, (P) *OTS\$*, OTS-39
 - made from floating-point, (P) *MTH\$*, MTH-39, MTH-41
 - multiplication of, (P) *OTS\$*, OTS-52
 - natural logarithm of, (P) *MTH\$*, MTH-34, MTH-36
 - sine of, (P) *MTH\$*, MTH-52, MTH-53
 - complex_number data type, (P) *Interfaces*, B-3
- Component failures, (S) *Dependable*, 9-10
- Component names
 - plural forms, (S) *DECnet Mgmt*, 3-74
 - using wildcards with, (S) *DECnet Mgmt Util*, 1-3
- Components, (S) *DECnet Mgmt*, 3-1
 - in network configuration database, (S) *DECnet Intro*, 3-33
 - of item lists, (P) *Interfaces*, B-11
- Composed input
 - See also Key tables
 - terminating, (P) *Concepts*, 7-28
- Composition operations, (P) *SMG\$*, 2-1
- Compound document architecture
 - See CDA
- Compound documents, (P) *File Appl*, 4-19
- Comprehensive training, (S) *Dependable*, 5-6
- Compressed data section, (P) *Alpha SDA*, SDA-58
- Compression, (P) *Rec Mgmt Util*, 4-5, 4-27
 - negative values, (P) *Rec Mgmt Util*, 4-4
 - of data record, (P) *Rec Mgmt Util*, 4-26
 - within data record, (P) *Rec Mgmt Util*, 4-4
 - within primary key, (P) *Rec Mgmt Util*, 4-4, 4-26
- Compression text descriptors, (P) *Calling Std*, 5-23
- Compute-bound processes, (S) *Alpha Perform*, 17-8
 - controlling growth, (S) *VAX Perform*, 5-9; (S) *Alpha Perform*, 17-8
 - curtailing, (S) *VAX Perform*, 5-9
 - suspending, (S) *VAX Perform*, 5-9
- Computed calls, (P) *Calling Std*, 3-41
- Compute queue, (S) *Alpha Perform*, 9-1
 - measure of CPU responsiveness, (S) *VAX Perform*, 3-9
 - optimal length, (S) *Alpha Perform*, 9-2
- Computer-aided software engineering
 - See CASE, COHESION, and DECset
- Computer interconnect
 - See CI
- Computing components
 - managing resources, (S) *Dependable*, 9-1
 - options of dependable system building blocks, (S) *Dependable*, 3-1
- Computing styles, (G) *SW Overview*, 1-3
- Concatenating files, (G) *DCL A-M*, DCLI-35, DCLI-78
- Concatenating input files, (P) *Rec Mgmt Util*, 2-5
- Concealed logical names, (P) *File Appl*, 5-7
- Concepts of dependability, (S) *Dependable*, 1-8
- Conditionals
 - definition, (G) *User*, 15-7
 - determining in command procedures, (G) *User*, 15-8
 - testing in command procedures, (G) *User*, 15-9

Conditional store commands

Alpha object language, (P) *Linker*, B-35, B-40

Condition codes

chaining, (P) *Concepts*, 13-53

definition, (G) *User*, 15-41; (G) *Help Msg*, 1-3

displaying, (G) *User*, 15-41

severity levels of, (G) *User*, 15-43

signaling, (P) *Concepts*, 13-32

SS\$_EXQUOTA, (P) *Concepts*, 13-21

SS\$_NOPRIV, (P) *Concepts*, 13-21

with EXIT command, (G) *User*, 15-42

Condition handlers, (G) *Compatibility*, 4-2; (P)

Interfaces, 1-11; (P) *Calling Std*, 6-6; (P)

Debugger, 13-13

argument list, (P) *Concepts*, 13-27

arithmetic, (P) *Concepts*, 13-17

call frame, (P) *Concepts*, 13-24

catchall, (P) *Concepts*, 13-25, 13-43

condition code, (P) *Concepts*, 13-65

continuing execution of, (P) *Concepts*, 13-64

coordinating with establisher, (P) *Calling Std*, 6-17

debugging, (P) *Concepts*, 13-70; (P) *Debugger*, 13-10

declaring, (P) *DECthreads*, B-1

default, (P) *Concepts*, 13-42; (P) *Calling Std*, 6-17

definition, (P) *Calling Std*, 1-4

deleting, (P) *Calling Std*, 6-8

establishing, (P) *Concepts*, 13-5; (P) *Calling Std*, 6-8

establishing dynamic, (G) *Compatibility*, 4-4

example, (P) *Concepts*, 13-69

exceptions, (P) *Calling Std*, 6-6

exit, (P) *Interfaces*, B-7

exiting, (P) *Concepts*, 13-66

last-chance, (P) *Concepts*, 13-43

last-chance exception vector, (P) *Concepts*, 13-25

mechanism argument vectors, (P) *Concepts*, 13-35

memory use, (P) *Calling Std*, 6-17

multiple active signals, (P) *Calling Std*, 6-23

operations, (P) *Calling Std*, 6-7

options, (P) *Calling Std*, 6-7

parameters and invocation, (P) *Calling Std*, 6-12

primary exception vector, (P) *Concepts*, 13-24

properties, (P) *Calling Std*, 6-12

register values, (P) *Calling Std*, 6-20

reinvokable, (P) *Calling Std*, 6-24

request to unwind, (P) *Calling Std*, 6-19

resignaling, (P) *Concepts*, 13-64

returning from, (P) *Calling Std*, 6-18

search, (P) *Calling Std*, 6-10

searching for, (P) *Concepts*, 13-24

secondary exception vectors, (P) *Concepts*, 13-24

Condition handlers (cont'd)

signal argument array, (P) *Concepts*, 13-32

software supplied, (P) *Concepts*, 13-42

specifying, (P) *Concepts*, 13-4

stack usage, (P) *Calling Std*, 6-7

traceback, (P) *Concepts*, 13-25, 13-42

types, (P) *Concepts*, 13-41

types of action, (P) *Concepts*, 13-45

unwinding, (P) *Concepts*, 13-64

use of, (P) *Concepts*, 13-27

user-supplied, (P) *Concepts*, 13-42

writing, (P) *Concepts*, 13-63

Condition handling, (P) *Concepts*, 13-3; (P)

MTH\$, 1-3

See also Exceptions, Exception conditions, and Message utility

alignment fault reporting, (P) *Concepts*, 13-15

arithmetic exceptions, (P) *Concepts*, 13-13

at AST level, (P) *Modular Proc*, 3-21

continuing, (P) *Concepts*, 13-45

displaying messages, (P) *Concepts*, 13-49

GOTO unwind, (P) *Concepts*, 13-45

hardware exception conditions, (P) *Concepts*, 13-12

logging error messages, (P) *Concepts*, 13-6

logging error messages to a file, (P) *Concepts*, 13-55

mechanism argument vectors, (P) *Concepts*, 13-35, 13-37

mechanism array format, (P) *Concepts*, 13-37

procedure exceptions, (P) *Calling Std*, 6-1

resignaling, (P) *Concepts*, 13-45, 13-67

return status, (P) *Concepts*, 13-21

run-time library support routines, (P) *Concepts*, 13-18

signal argument vectors, (P) *Concepts*, 13-32

signaling a condition, (P) *Concepts*, 13-45

stack traceback, (P) *Concepts*, 13-6

stack unwind, (P) *Concepts*, 13-6, 13-45

standards, (P) *Calling Std*, 6-1

system services, (P) *Environment*, 10-5, 10-7

unwinding, (P) *Concepts*, 13-67

user-defined messages, (P) *Concepts*, 13-6

VAX hardware exceptions, (P) *Concepts*, 13-12

vector processor, (P) *Calling Std*, 6-14

Condition Handling Facility (CHF), (P) *Concepts*,

13-41; (P) *Calling Std*, 6-6, 6-7

definition, (P) *Concepts*, 13-1

function, (P) *Concepts*, 13-4

Condition-handling routines

global symbols, (P) *Alpha SDA*, SDA-61; (P)

VAX SDA, SDA-64

Conditions

for exception, (P) *Concepts*, 13-6

from called procedures, (P) *Calling Std*, 6-1

- Condition values, (P) *Modular Proc*, 3-3;
 - (P) *Concepts*, 13-19 to 13-20, 13-31; (P) *Interfaces*, 2-22, 4-7, B-6; (P) *LIB\$, LIB-297*
 See also Completion status codes
 - condition identification, (P) *Calling Std*, 6-3
 - control, (P) *Calling Std*, 6-3
 - definition, (P) *Concepts*, 13-63; (P) *Calling Std*, 1-4
 - description, (P) *Calling Std*, 6-1
 - evaluating, (P) *Alpha SDA*, SDA-45; (P) *VAX SDA*, SDA-53
 - examining, (P) *Alpha SDA*, SDA-48; (P) *VAX SDA*, SDA-55
 - facility, (P) *Calling Std*, 6-3
 - format, (P) *Calling Std*, 6-1
 - information provided by, (P) *Interfaces*, 4-8
 - interpreting severity codes, (P) *Calling Std*, 6-4
 - message number, (P) *Calling Std*, 6-3
 - registers use, (P) *Calling Std*, 2-1
 - returned, (P) *Interfaces*, 1-12
 - in I/O status block, (P) *Interfaces*, 1-12
 - in mailbox, (P) *Interfaces*, 1-12
 - in R0, (P) *Interfaces*, 1-4
 - signaled in register, (P) *Interfaces*, 1-6, 1-12
 - RTL symbols, (P) *Interfaces*, 3-6
 - severity, (P) *Concepts*, 13-19
 - severity codes, (P) *Calling Std*, 6-3
 - signaled, (P) *Interfaces*, 1-6, 1-12
 - symbolic codes, (P) *Interfaces*, 4-8
 - symbols, (P) *Calling Std*, 6-3
 - testing, (P) *Interfaces*, 4-8, 4-9
 - use, (P) *Calling Std*, 6-5
- Condition Values Returned heading, (P) *Interfaces*, 1-11
- Condition variable, (P) *DECthreads*, 2-10
 - comparing to mutex, (P) *DECthreads*, 3-7
 - creating, (P) *DECthreads*, pthread-28, cma-30
 - definition of, (P) *DECthreads*, pthread-28
 - deleting, (P) *DECthreads*, pthread-27, cma-32
 - signaling, (P) *DECthreads*, 3-9
 - waiting for, (P) *DECthreads*, pthread-35, cma-37
 - waiting for a specified time, (P) *DECthreads*, pthread-33, cma-35
- Condition variable attributes, (P) *DECthreads*, 2-7
- Condition variable attributes object
 - creating, (P) *DECthreads*, pthread-24
 - deleting, (P) *DECthreads*, pthread-25
- /CONDITION_VALUE qualifier, (P) *Alpha SDA*, SDA-45; (P) *VAX SDA*, SDA-53
- cond_value data type, (P) *Interfaces*, B-6
- Configuration databases, (S) *DECnet Intro*, 4-11;
 - (S) *DECnet Mgmt*, 2-1, 3-1, 5-20
 building manually using NCP, (S) *Sys Mgr Tuning*, 21-11
 - changing location of file, (S) *Sys Mgr Tuning*, 21-10
 - circuit entry, (S) *DECnet Mgmt*, 2-7
 - contents of, (S) *Sys Mgr Tuning*, 21-10
 - DECnet, (S) *DECnet Intro*, 2-16, 3-10, 3-34; (S) *DECnet Mgmt*, 1-14, 3-1
 - for local node, (S) *DECnet Intro*, 2-16
 - line entry, (S) *DECnet Mgmt*, 2-11
 - logging entry, (S) *DECnet Mgmt*, 2-28
 - modifying using NCP, (S) *Sys Mgr Tuning*, 21-11
 - node entry, (S) *DECnet Mgmt*, 2-1, 3-5
 - permanent, (S) *DECnet Intro*, 3-32
 - permanent database, (S) *Sys Mgr Tuning*, 21-11
 - stored in SYS\$SYSTEM:NETNODE_REMOTE.DAT file, (S) *Sys Mgr Tuning*, 21-10
 - tailoring with NCP, (S) *DECnet Intro*, 3-32
 - volatile, (S) *DECnet Intro*, 3-32
 - volatile database, (S) *Sys Mgr Tuning*, 21-11
- Configurations, (S) *Dependable*, 4-4 to 4-6
 - building SCSI VMScluster systems with DWZZA converters, (G) *V6.2 New Feat*, 7-11
 - building with add on SCSI adapters, (G) *V6.2 New Feat*, 7-9
 - building with an HSZ40 controller, (G) *V6.2 New Feat*, 7-13
 - building with BA350/BA353 StorageWorks enclosures, (G) *V6.2 New Feat*, 7-9
 - building with internal SCSI adapters, (G) *V6.2 New Feat*, 7-18
 - changing from CI or DSSI to a mixed-interconnect, (S) *VMScluster Sys*, 8-23
 - changing from local area to mixed-interconnect, (S) *VMScluster Sys*, 8-23
 - cross-architecture booting, (S) *VMScluster Sys*, 10-5
 - DECnet, (S) *VMScluster Sys*, 4-8
 - displaying LAN, (G) *V6.2 New Feat*, 6-12; (S) *Sys Mgr Tuning*, 22-9
 - DSSI, (S) *VMScluster Sys*, 3-3
 - FDDI, (S) *VMScluster Sys*, 3-10
 - FDDI network, (S) *VMScluster Sys*, 3-11
 - for software product options, (S) *Sys Mgr Essentials*, 3-22
 - guidelines for growing your VMScluster, (S) *VMScluster Sys*, 9-1
 - guidelines for system, (S) *DECnet Mgmt*, 5-31 to 5-35
 - hardware, (G) *SW Overview*, 1-7

Configurations (cont'd)

- installing SCSI VMScluster systems, (G) *V6.2 New Feat*, 7-19
- LAN, (G) *V6.2 New Feat*, 6-1; (S) *Sys Mgr Tuning*, 22-1
- LAN firmware updates, (G) *V6.2 New Feat*, 6-13; (S) *Sys Mgr Tuning*, 22-14
- LAN segments in a VMScluster, (S) *Dependable*, 7-6 to 7-7
- mixed-interconnect, (S) *VMScluster Sys*, 3-13
- multiple adapters in VMSclusters, (S) *Dependable*, 7-5
- multiple CI adapters, (S) *VMScluster Sys*, 3-3
- multiple DSSI adapters, (S) *VMScluster Sys*, 3-5
- multiple-host SCSI access on VMScluster system, (G) *V6.2 New Feat*, 7-2
- multiple LAN adapters, (S) *VMScluster Sys*, 3-15, 3-17
- network
 - DECnet support, (S) *Sys Mgr Tuning*, 21-6
 - local area LAN, (S) *Sys Mgr Tuning*, 21-6
 - multiple-area, (S) *Sys Mgr Tuning*, 21-6
 - single-area, (S) *Sys Mgr Tuning*, 21-6
- of shadow sets, (S) *VMScluster Sys*, 6-23
- queue
 - sample batch queuing system, (S) *Sys Mgr Essentials*, 13-4 to 13-7
 - sample print queuing system, (S) *Sys Mgr Essentials*, 13-8 to 13-14
- recording data, (S) *VMScluster Sys*, 10-4
- SCSI concepts, (G) *V6.2 New Feat*, 7-5
- SCSI hardware, (G) *V6.2 New Feat*, 7-9
- SCSI interconnect requirements, (G) *V6.2 New Feat*, 7-3
- SCSI VMScluster systems, (G) *V6.2 New Feat*, 7-1
- shadow set
 - effect on availability, (S) *Dependable*, 8-19
 - examples, (S) *Dependable*, 8-23
 - high-availability local area VAXcluster, (S) *Dependable*, 8-23
 - VAXcluster with multiple HSCs and star couplers, (S) *Dependable*, 8-25
- single-ended and differential SCSI signaling, (G) *V6.2 New Feat*, 7-7
- single-host SCSI access on VMScluster system, (G) *V6.2 New Feat*, 7-2
- software integration, (S) *Dependable*, 8-31
- standalone, (G) *SW Overview*, 1-7
- three LAN segments in a VMScluster, (S) *VMScluster Sys*, 3-19
- troubleshooting SCSI VMScluster systems, (G) *V6.2 New Feat*, 7-33
- two LAN segments, (S) *VMScluster Sys*, 3-18
- types, (S) *VMScluster Sys*, 3-1
- unique SCSI device IDs, (G) *V6.2 New Feat*, 7-6

Configurations (cont'd)

- using CLUSTER_CONFIG for SCSI VMScluster systems, (G) *V6.2 New Feat*, 7-26
- VAXcluster, (G) *SW Overview*, 1-7
- VMScluster, (G) *SW Overview*, 1-7
- WANs, (G) *V6.2 New Feat*, 8-2
- with multiple LAN adapters and multiple LAN segments, (S) *VMScluster Sys*, 3-17
- CONFIGURATION SET CLUSTER_
 - AUTHORIZATION command
 - in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-15
- CONFIGURATION SET command
 - in SYSMAN, (S) *Sys Mgr Tuning*, 20-16
- CONFIGURATION SET TIME command
 - in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-16
- CONFIGURATION SHOW CLUSTER_
 - AUTHORIZATION command
 - in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-17
- CONFIGURATION SHOW command
 - in SYSMAN, (S) *Sys Mgr Tuning*, 20-16
- CONFIGURATION SHOW TIME command
 - in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-18
- Configurator module
 - disabling surveillance, (S) *DECnet Mgmt*, 3-35
 - enabling surveillance, (S) *DECnet Mgmt*, 3-34
 - Ethernet, (S) *DECnet Intro*, 4-6; (S) *DECnet Mgmt*, 1-17, 2-11, 3-34
 - NICCONFIG, (S) *DECnet Mgmt*, 1-12
- CONFIGURE command
 - in SYSGEN, (S) *Sys Mgmt Util M-Z*, 5-7
- CONFIGURE phase of system startup, (S) *Sys Mgr Essentials*, 5-4, 5-18, 7-8
- definition, (S) *Sys Mgr Essentials*, 7-6
- CONFIGURE process
 - starting, (S) *Sys Mgr Essentials*, 5-5
- /CONFIGURE qualifier, (S) *DECamds*, 2-1
- Configuring
 - a DDCMP dynamic asynchronous network, (S) *DECnet Mgmt*, 5-29
 - a DDCMP multipoint network, (S) *DECnet Mgmt*, 5-25
 - a DDCMP point-to-point network, (S) *DECnet Mgmt*, 5-23
 - a DDCMP static asynchronous network, (S) *DECnet Mgmt*, 5-27
 - a DECnet node, (S) *DECnet Mgmt*, 1-14
 - a multiple-area network, (S) *DECnet Mgmt*, 1-2
 - an Ethernet network, (S) *DECnet Mgmt*, 5-20
 - an FDDI network, (S) *DECnet Mgmt*, 5-21
 - a single-area network, (S) *DECnet Mgmt*, 1-2
 - automatic network, (S) *DECnet Intro*, 2-16, 3-10, 3-11
 - a VMScluster environment
 - Refer to the *Guidelines for VMScluster Configurations*
 - changes for network, (S) *DECnet Intro*, 4-2
 - CI, (S) *DECnet Mgmt*, 1-3

Configuring (cont'd)

- command procedure NETCONFIG.COM, (S) *DECnet Intro*, 2-16
- DECnet nodes, (S) *DECnet Intro*, 2-16, 3-8, 3-10
- end nodes, (S) *DECnet Mgmt*, 2-18
- Ethernet, (S) *DECnet Mgmt*, 1-4
- FDDI, (S) *DECnet Mgmt*, 1-3, 1-6
- introduction to NETCONFIG.COM, (S) *DECnet Mgmt*, 1-14
- introduction to NETCONFIG_UPDATE.COM, (S) *DECnet Mgmt*, 1-14
- LAN (local area network), (S) *DECnet Mgmt*, 1-3
- manual network, (S) *DECnet Intro*, 3-11
- multipoint, (S) *DECnet Mgmt*, 1-3, 1-8
- network, (S) *DECnet Mgmt*, 1-3, 5-1
- overview of procedures, (S) *DECnet Mgmt*, 5-3
- point-to-point, (S) *DECnet Mgmt*, 1-3, 1-8
- prerequisites, (S) *DECnet Mgmt*, 5-1
- procedure examples, (S) *DECnet Mgmt*, 5-19 to 5-35
- procedure for automatic, (S) *DECnet Mgmt*, 5-5 to 5-11
- required privileges, (S) *DECnet Mgmt*, 5-1
- routing considerations, (S) *DECnet Mgmt*, 2-15
- sample Phase IV DECnet, (S) *DECnet Mgmt*, 1-4
- typical VMScluster, (S) *DECnet Mgmt*, 1-10
- using NETCONFIG.COM, (S) *DECnet Mgmt*, 5-5 to 5-11

Configuring DECnet, (S) *Sys Mgr Tuning*, 21-7

Configuring devices

- HSC
 - in system startup, (S) *Sys Mgr Essentials*, 7-6
 - in system startup, (S) *Sys Mgr Essentials*, 7-6

Configuring the DECnet database, (G) *Compatibility*, 2-6; (S) *Comparison*, 6-2

Configuring the I/O subsystem

- on Alpha systems, (S) *Comparison*, 2-16

/CONFIRM qualifier

- in Analyze/Disk_Structure utility, (S) *Sys Mgmt Util A-L*, 3-7
- in Backup utility, (S) *Sys Mgmt Util A-L*, 7-24
- in Mount utility, (S) *Sys Mgmt Util M-Z*, 2-16

Congestion control

- in PEDRIVER, (S) *VMScluster Sys*, G-1
- retransmissions, (S) *VMScluster Sys*, G-1

CONINTERR.EXE driver, (S) *Sys Mgr Essentials*, 7-7

Conjugate of complex number, (P) *MTH\$*, MTH-43, MTH-44

CONNECT/ADAPTER command

- in SYSGEN, (S) *Sys Mgmt Util M-Z*, 5-9

CONNECT command, (G) *DCL A-M*, DCLI-60 to DCLI-62; (P) *Debugger*, 14-4, 14-14; (P) *I/O User*, 5-18

/CONTINUE qualifier, (G) *User*, 18-8

in SYSGEN (VAX), (S) *Sys Mgr Essentials*, 7-7

- for connecting the console device, (S) *Sys Mgr Essentials*, 7-7
- in system startup, (S) *Sys Mgr Essentials*, 5-7

Connecting devices, (S) *Sys Mgmt Util M-Z*, 5-5, 5-9

- automatically, (S) *Sys Mgr Essentials*, 7-6, 7-7
- in system startup, (S) *Sys Mgr Essentials*, 5-4
- manually, (S) *Sys Mgr Essentials*, 7-7, 7-8
- in system startup, (S) *Sys Mgr Essentials*, 5-7
- on VAX, (S) *Sys Mgr Essentials*, 7-7

network communications device, (S) *Sys Mgr Essentials*, 7-7, 7-8

on Alpha systems, (S) *Sys Mgmt Util M-Z*, 6-34

virtual terminals, (S) *Sys Mgr Essentials*, 7-11

Connecting hardware devices, (S) *Comparison*, A-3

Connection descriptor table entries, (S) *VMScluster Sys*, 9-18

Connection manager, (S) *VMScluster Sys*, 1-4

- displaying SDA information, (P) *Alpha SDA*, SDA-80; (P) *VAX SDA*, SDA-86
- overview, (S) *VMScluster Sys*, 2-5
- state transitions, (S) *VMScluster Sys*, 2-10

/CONNECTION qualifier, (P) *Alpha SDA*, SDA-144; (P) *VAX SDA*, SDA-166

Connections

- asynchronous, (S) *DECnet Intro*, 3-4
- asynchronous DDCMP, (S) *DECnet Intro*, 3-9
- auditing, (S) *Security*, 9-7
- CI, (S) *DECnet Intro*, 3-9
- count of requests for, (S) *DECnet Intro*, 4-3
- displaying SDA information, (P) *Alpha SDA*, SDA-84, SDA-124, SDA-144
- displaying SDA information about, (P) *VAX SDA*, SDA-91, SDA-141, SDA-166
- endpoints, (S) *TCP/IP*, 2-5
- in LAT environment, (S) *Sys Mgmt Util A-L*, 13-32, 13-57
- LAN (local area network), (S) *DECnet Intro*, 3-9
- multipoint, (S) *DECnet Intro*, 1-12
- of communications hardware, (S) *DECnet Intro*, 3-4
- point-to-point, (S) *DECnet Intro*, 1-12
- remote, (S) *TCP/IP*, 3-2
- specifying type with LATCP, (S) *Sys Mgmt Util A-L*, 13-27
- synchronous, (S) *DECnet Intro*, 3-4
- synchronous DDCMP, (S) *DECnet Intro*, 3-9

Connections (cont'd)

- TELNET, (S) *TCP/IP*, 3-2
- verification of network, (S) *DECnet Intro*, 3-29, 3-31
- CONNECTIONS class
 - adding or restoring, (S) *Sys Mgmt Util M-Z*, 4-14
 - fields belonging to, (S) *Sys Mgmt Util M-Z*, 4-21
 - removing, (S) *Sys Mgmt Util M-Z*, 4-42
- Connectivity, (S) *TCP/IP*, 1-7
- CONNECT NODE command, (S) *DECnet Mgmt*, 4-19; (S) *DECnet Mgmt Util*, 3-34
- in LANCP utility, (S) *Sys Mgmt Util A-L*, 12-10
- Connect service, (P) *RMS Ref*, RMS-6, A-15; (P) *File Appl*, 8-5
- asynchronous operations and, (P) *File Appl*, 8-19
- comparing positioning for various file organizations, (P) *RMS Ref*, RMS-7
- condition values, (P) *RMS Ref*, RMS-9
- connecting record stream, (P) *RMS Ref*, 3-5
- control block input fields, (P) *RMS Ref*, RMS-7
- control block output fields, (P) *RMS Ref*, RMS-8
- effect on next-record position, (P) *File Appl*, 8-17
- program example, (P) *RMS Ref*, A-23
- use with multiple keys, (P) *RMS Ref*, A-23
- CONNECT VIA command, (S) *DECnet Mgmt*, 4-19; (S) *DECnet Mgmt Util*, 3-35
- CONSCOPY.COM command procedure, (S) *Sys Mgr Essentials*, 5-49
- CONSCOPY command procedure
 - not available on Alpha systems, (S) *Comparison*, 2-12
- Consistency
 - ensuring during failures, (S) *Dependable*, 8-22
- Console disks
 - See RX01 console disk
- Console report during UETP, (S) *Sys Mgr Tuning*, 17-15
- Consoles
 - connecting to host node, (S) *DECnet Mgmt Util*, 3-34
 - connecting to host node on a specified circuit, (S) *DECnet Mgmt Util*, 3-35
 - connection, (S) *DECnet Intro*, 2-16
- Console storage device
 - connecting (VAX), (S) *Sys Mgr Essentials*, 7-7
 - copying, (S) *Sys Mgr Essentials*, 5-49
 - use in booting, (S) *Sys Mgr Essentials*, 4-2
- Console subsystem
 - actions in response to BOOT command, (S) *Comparison*, 2-11

- Console terminals, (S) *Sys Mgr Essentials*, 2-21, 2-23; (P) *I/O User*, 5-1
- C2 system requirements, (S) *Security*, C-6
- C2 systems and, (S) *Security*, C-10
- HSC and C2 system requirements, (S) *Security*, C-6
- message
 - indicating lack of installed page file, (S) *Sys Mgr Essentials*, 5-6
 - indicating site-independent startup, (S) *Sys Mgr Essentials*, 4-5
 - indicating site-specific startup, (S) *Sys Mgr Essentials*, 4-5
 - login welcome, (S) *Sys Mgr Essentials*, 2-10
- Console volumes
 - copying
 - CONSCOPY.COM not available on Alpha systems, (S) *Comparison*, 2-12
- Constraints
 - putting into perspective, (S) *Dependable*, 4-3
 - to achieve dependability, (S) *Dependable*, 4-1
- Construction phase
 - applying dependability strategies, (S) *Dependable*, 1-16
 - building dependable systems, (S) *Dependable*, 1-12
- Consulting
 - See Digital consulting
- Container files, (S) *Sys Mgr Essentials*, 3-20
- Contents-of operator, (P) *Debugger*, 8-6, 8-19, B-8
- Contents of stored machine check frames
 - displaying in SDA, (P) *Alpha SDA*, SDA-110
- Context
 - generating key value for, (P) *DECthreads*, pthread-49, cma-45
 - obtaining, (P) *DECthreads*, pthread-46, cma-47
 - per-thread, (P) *DECthreads*, 2-14
 - SDA CPU, (P) *Alpha SDA*, SDA-10; (P) *VAX SDA*, SDA-14
 - SDA process, (P) *Alpha SDA*, SDA-10; (P) *VAX SDA*, SDA-12
 - setting, (P) *DECthreads*, pthread-74, cma-48
 - uses for, (P) *DECthreads*, pthread-49, cma-45
- CONTEXT attribute, (P) *Rec Mgmt Util*, 4-9, 4-18
- context data type, (P) *Interfaces*, B-6
- Context switching
 - definition, (S) *Alpha Perform*, 6-1
- Context variables, with DCX routines, (P) *Util Routines*, DCX-17
- Contiguity, (P) *File Appl*, 10-27
- FAB and XAB fields, (P) *File Appl*, 3-8

- CONTIGUOUS attribute, (P) *Rec Mgmt Util*, 4-7, 4-18; (P) *File Appl*, 3-24, 4-34
- Contiguous-best-try option, (P) *File Appl*, 4-34
 - See also FAB\$V_CBT option
- Contiguous-best-try request, (P) *File Appl*, 3-8
- Contiguous option, (P) *File Appl*, 4-34
 - See also FAB\$V_CTG option
- /CONTIGUOUS qualifier, (P) *Linker*, LINK-7
- Contiguous request, (P) *File Appl*, 3-8
- CONTIN.SYS file, (P) *File Appl*, 1-8
- Contingency planning
 - service from Digital, (S) *Dependable*, 10-3
- Continuation character (-)
 - use in RMS coding, (P) *RMS Ref*, A-5
- Continuation files, (P) *File Appl*, 1-8
 - CONTIN.SYS, (S) *Sys Mgr Tuning*, A-9
 - reserved file, (S) *Sys Mgr Tuning*, A-9
 - used as extension file identifier, (S) *Sys Mgr Tuning*, A-9
- Continuation volumes
 - in volume set, (S) *Sys Mgr Essentials*, 8-40
 - mounting in tape volume sets, (S) *Sys Mgr Essentials*, 8-38
- CONTINUE command, (G) *User*, 18-4; (G) *DCL A-M*, DCLI-63
 - in conversational boot, (S) *Sys Mgr Essentials*, 4-6
- Continuous improvement process
 - for dependability, (S) *Dependable*, 2-1 to 2-3
- Continuous processing
 - multiple system kernels, (S) *Dependable*, 4-5
- /CONTINUOUS qualifier, (S) *Sys Mgmt Util M-Z*, 4-7
- Control
 - regions
 - examining, (P) *Alpha SDA*, SDA-49
- Control access
 - acquiring, (S) *Security*, 4-11, 4-25, 4-28
 - common event flag clusters, (S) *Security*, 5-3
 - devices, (S) *Security*, 5-4
 - files, (S) *Security*, 5-8
 - for disk directory files, (S) *Sys Mgr Essentials*, 9-11
 - for disk files, (S) *Sys Mgr Essentials*, 9-6
 - global sections, (S) *Security*, 5-14
 - limitations, (S) *Security*, 4-29
 - logical name tables, (S) *Security*, 5-16
 - queues, (S) *Security*, 5-17
 - resource domains, (S) *Security*, 5-19
 - security class, (S) *Security*, 5-20
 - volumes, (S) *Security*, 5-21
- Control actions
 - inhibiting, (P) *Concepts*, 7-41
- Control and Status Register
 - See CSR
- Control block options
 - specifying by symbolic bit offset, (P) *RMS Ref*, 2-3
- Control blocks
 - See also Data structures and RMS
 - dual purpose, (P) *RMS Ref*, 1-5
 - field naming conventions, (P) *RMS Ref*, 2-2
 - for extended attributes, (P) *RMS Ref*, 1-6
 - for file name operations, (P) *RMS Ref*, 1-6
 - for file services, (P) *RMS Ref*, 1-3
 - formatting, (P) *Alpha SDA*, SDA-53; (P) *VAX SDA*, SDA-60
 - for record services, (P) *RMS Ref*, 1-5
 - macro names, (P) *RMS Ref*, A-2
 - network, (S) *DECnet Intro*, 2-16
 - requirements for valid default values, (P) *RMS Ref*, 1-5
 - symbolic bit offset, (P) *RMS Ref*, 2-3
 - symbolic constant (keyword) value, (P) *RMS Ref*, 2-3
 - symbolic naming exceptions, (P) *RMS Ref*, 2-3
 - symbolic offsets, (P) *RMS Ref*, 2-2
 - types of macros, (P) *RMS Ref*, A-1
 - use restrictions, (P) *RMS Ref*, 2-1
 - use with OpenVMS languages, (P) *RMS Ref*, 2-1
- Control block store macros
 - description, (P) *RMS Ref*, A-1
 - example, (P) *RMS Ref*, A-8
 - placement guidelines, (P) *RMS Ref*, A-7
 - requirement for number sign, (P) *RMS Ref*, A-8
 - use of R0, (P) *RMS Ref*, A-7
- Control characters
 - ASCII values, (G) *User*, D-3
 - list, (P) *I/O User*, B-1
 - terminal, (P) *I/O User*, 5-4 to 5-7, 5-9
- Control commands
 - Alpha object language, (P) *Linker*, B-34
 - VAX object language, (P) *Linker*, A-30
- Control connection routines, (P) *I/O User*, C-1 to C-14
- Control key sequences, (P) *I/O User*, 5-8
- Controller designation field
 - default value, (G) *User*, 12-9
 - definition, (G) *User*, 12-10
- Controller errors
 - recovery from, (S) *Dependable*, 8-22t
- Controller loopback tests, (S) *DECnet Intro*, 4-9; (S) *DECnet Mgmt*, 7-6, 7-8
- Controllers
 - dual-pathed devices, (S) *VMScluster Sys*, 6-3
 - dual-ported devices, (S) *VMScluster Sys*, 6-2
 - HSC storage subsystem, (S) *VMScluster Sys*, 1-3
 - HSD storage subsystem, (S) *VMScluster Sys*, 1-3

Controllers (cont'd)

HSJ storage subsystem, (S) *VMScluster Sys*, 1-3

HSZ40 controllers, (G) *V6.2 New Feat*, 7-13

HSZ storage subsystem, (S) *VMScluster Sys*, 1-3

Controlling

line traffic, (S) *DECnet Mgmt*, 3-41

logical link activity, (S) *DECnet Mgmt*, 2-24, 3-56

tributaries, (S) *DECnet Mgmt*, 3-31

Control region, (P) *Alpha SDA*, SDA-15; (P) *VAX SDA*, SDA-18

adding page to, (P) *Sys Svc I*, SYS1-269

deleting page from, (P) *Sys Svc I*, SYS1-193

examining, (P) *VAX SDA*, SDA-56

operator (H), (P) *VAX SDA*, SDA-16

page table

displaying, (P) *VAX SDA*, SDA-149

Control region operator (H), (P) *Alpha SDA*, SDA-13

Control stations, (S) *DECnet Mgmt*, 1-8, 2-8

CONTROL_C_INTERCEPTION package, (P) *Debugger*, 16-33

CONTROL_FIELD_SIZE attribute, (P) *Rec Mgmt Util*, 4-33, 4-34; (P) *File Appl*, 4-33

CONV\$CONVERT routine, (P) *Util Routines*, CONV-6

CONV\$PASS_FILES routine, (P) *Util Routines*, CONV-9

CONV\$PASS_OPTIONS routine, (P) *Util Routines*, CONV-12

CONV\$RECLAIM routine, (P) *Rec Mgmt Util*, 3-1; (P) *Util Routines*, CONV-16

Conventional computing, (S) *Dependable*, 1-1

Conventions, (S) *DECcmds*, x

OpenVMS Alpha, (P) *Calling Std*, 3-1

OpenVMS VAX, (P) *Calling Std*, 2-1

Conversational boot

changing system parameters, (S) *Sys Mgr Essentials*, 4-6; (S) *Sys Mgr Tuning*, 14-36

CONTINUE command, (S) *Sys Mgr Essentials*, 4-6

controlling, (S) *VMScluster Sys*, 8-10

location of computer-specific instructions, (S) *Sys Mgr Essentials*, 4-4

performing, (S) *Sys Mgr Essentials*, 4-3

SET command, (S) *Sys Mgr Essentials*, 4-6

SET/STARTUP command, (S) *Sys Mgr Essentials*, 4-12

SHOW command, (S) *Sys Mgr Essentials*, 4-6

showing system parameters, (S) *Sys Mgr Essentials*, 4-6; (S) *Sys Mgr Tuning*, 14-36

SHOW/STARTUP command, (S) *Sys Mgr Essentials*, 4-12

specifying an alternate startup command procedure, (S) *Sys Mgr Essentials*, 4-12

SYSDOOR prompt, (S) *Sys Mgr Essentials*, 4-3

Conversational boot (cont'd)

tasks allowed in, (S) *Sys Mgr Essentials*, 4-3

USE command, (S) *Sys Mgr Essentials*, 4-7

uses of, (S) *Sys Mgr Essentials*, 4-3

with alternate system parameter file, (S) *Sys Mgr Essentials*, 4-7

with minimum startup, (S) *Sys Mgr Essentials*, 4-14

Conversations

over the network, (S) *DECnet Intro*, 2-11

Conversation text

in Phone, (G) *User*, 7-3

Conversions

binary text to unsigned integer, (P) *OTS\$*, OTS-18

floating-point to character string, (P) *OTS\$*, OTS-4

hexadecimal text to unsigned integer, (P) *OTS\$*, OTS-36

integer to binary text, (P) *OTS\$*, OTS-6

integer to FORTRAN L format, (P) *OTS\$*, OTS-9

integer to hexadecimal, (P) *OTS\$*, OTS-16

numeric text to floating-point, (P) *OTS\$*, OTS-30, OTS-34

unsigned decimal to integer, (P) *OTS\$*, OTS-27

unsigned octal to signed integer, (P) *OTS\$*, OTS-25

CONVERT (Convert utility)

See Convert utility

CONVERT.COM command procedure, (G) *User*, C-1

sample execution, (G) *User*, C-5

CONVERT command, (G) *DCL A-M*, DCLI-64; (P) *RMS Ref*, A-20

/APPEND qualifier, (P) *Rec Mgmt Util*, 2-2

/CREATE qualifier, (P) *Rec Mgmt Util*, 2-6

/EXCEPTIONS_FILE qualifier, (P) *Rec Mgmt Util*, 2-4, 2-7

/EXIT qualifier, (P) *Rec Mgmt Util*, 2-7

/FAST_LOAD qualifier, (P) *Rec Mgmt Util*, 2-8

/FDL qualifier, (P) *Rec Mgmt Util*, 2-10

/FILL_BUCKETS qualifier, (P) *Rec Mgmt Util*, 2-10, 4-26, 4-27

/FIXED_CONTROL qualifier, (P) *Rec Mgmt Util*, 2-11

in Monitor utility, (S) *Sys Mgmt Util M-Z*, 1-5

in network operations, (S) *DECnet Intro*, 2-9

/KEY qualifier, (P) *Rec Mgmt Util*, 2-12

list of qualifiers, (P) *Util Routines*, CONV-13

/MERGE qualifier, (P) *Rec Mgmt Util*, 2-12

/PAD qualifier, (P) *Rec Mgmt Util*, 2-4, 2-13

passing options, (P) *Util Routines*, CONV-12, CONV-14

/PROLOG qualifier, (P) *Rec Mgmt Util*, 2-14

/READ_CHECK qualifier, (P) *Rec Mgmt Util*, 2-15

setting qualifiers, (P) *Util Routines*, CONV-12

- CONVERT command (cont'd)
 /SHARE qualifier, (P) *Rec Mgmt Util*, 2-15
 /SORT qualifier, (P) *Rec Mgmt Util*, 2-15
 /STATISTICS qualifier, (P) *Rec Mgmt Util*, 2-16
 /TRUNCATE qualifier, (P) *Rec Mgmt Util*, 2-4, 2-17
 using /APPEND qualifier on sequential files, (P) *Rec Mgmt Util*, 2-2
 using /MERGE qualifier on indexed files, (P) *Rec Mgmt Util*, 2-2
 using /NOSORT qualifier to save sort order on indexed files, (P) *Rec Mgmt Util*, 2-2, 2-9
 using /PAD qualifier to fill in output records, (P) *Rec Mgmt Util*, 2-4
 /WORK_FILES qualifier, (P) *Rec Mgmt Util*, 2-18
 /WRITE_CHECK qualifier, (P) *Rec Mgmt Util*, 2-18
 CONVERT conversion statistics, (P) *Util Routines*, CONV-6
 CONVERT/DOCUMENT command, (G) *DCL A-M*, DCLI-65 to DCLI-76
 creating an options file, (G) *DCL A-M*, DCLI-70
 Converters
 using DWZZA in SCSI VMScluster systems, (G) *V6.2 New Feat*, 7-11
 Converting
 ASCII string to binary time, (P) *Sys Svc I*, SYS1-62
 ASCII string to UTC format, (P) *Sys Svc I*, SYS1-65
 audit event message, (P) *Sys Svc I*, SYS1-321
 binary time to ASCII string, (P) *Sys Svc I*, SYS1-29
 binary time to numeric time, (P) *Sys Svc II*, SYS2-163
 64-bit system time to UTC time, (P) *Sys Svc II*, SYS2-394
 UTC format to ASCII, (P) *Sys Svc I*, SYS1-35
 UTC time to numeric time, (P) *Sys Svc II*, SYS2-165
 Converting floating-point data types, (P) *LIB\$*, CVT-3
 CONVERT LOG command
 in LMCP, (S) *Sys Mgmt Util A-L*, 14-5
 CONVERT/RECLAIM command, (G) *DCL A-M*, DCLI-77
 /KEY qualifier, (P) *Rec Mgmt Util*, 3-3
 /STATISTICS qualifier, (P) *Rec Mgmt Util*, 3-2, 3-3
 Convert/Reclaim utility (CONVERT/RECLAIM), (P) *Environment*, 10-18; (P) *Rec Mgmt Util*, 3-1; (P) *File Appl*, 1-36, 3-19
 DCL qualifier, (P) *Rec Mgmt Util*, 3-3
 exiting, (P) *Rec Mgmt Util*, 3-2
 invoking, (P) *Rec Mgmt Util*, 3-2
 Convert/Reclaim utility (CONVERT/RECLAIM) (cont'd)
 restrictions, (P) *Rec Mgmt Util*, 3-2
 using with Prolog 3 files, (P) *File Appl*, 3-20
 with Prolog 3 files, (P) *File Appl*, 10-28
 CONVERT/RELAIM (Convert/Reclaim utility)
 See Convert/Reclaim utility
 CONVERT routines, (P) *Util Routines*, CONV-1 to CONV-5
 wildcard characters in, (P) *Util Routines*, CONV-10
 Convert utility (CONVERT), (P) *Environment*, 10-18; (P) *Rec Mgmt Util*, 2-1, 2-5, 4-4; (P) *File Appl*, 1-35, 9-8
 appending a remote file, (P) *Rec Mgmt Util*, 2-20
 comparing FAST_LOAD and NOFAST_LOAD options, (P) *Rec Mgmt Util*, 2-8
 converting a carriage control to stream, (P) *Rec Mgmt Util*, 2-21
 converting a remote file, (P) *Rec Mgmt Util*, 2-20
 converting carriage control formats, (P) *Rec Mgmt Util*, 2-3
 creating data files, (P) *Rec Mgmt Util*, 5-2; (P) *File Appl*, 4-15, 4-16
 DCL qualifiers, (P) *Rec Mgmt Util*, 2-6 to 2-20
 establishing RFAs, (P) *Rec Mgmt Util*, 3-1
 examples, (P) *Rec Mgmt Util*, 2-20 to 2-21
 converting a carriage control file to variable-length, (P) *Rec Mgmt Util*, 2-21
 converting fixed format to variable-length, (P) *Rec Mgmt Util*, 2-21
 converting record formats, (P) *Rec Mgmt Util*, 2-20
 improving a file's performance, (P) *Rec Mgmt Util*, 2-20
 reorganizing a remote file, (P) *Rec Mgmt Util*, 2-20
 exception conditions, (P) *Rec Mgmt Util*, 2-4
 FDL output data file, (P) *Rec Mgmt Util*, 5-2
 making a file contiguous, (P) *File Appl*, 10-28
 populating a file, (P) *File Appl*, 4-27
 reorganizing files, (P) *File Appl*, 10-28
 reorganizing noncontiguous files, (P) *File Appl*, 3-27, 10-28
 restoring contiguity on fragmented disks, (S) *VAX Perform*, 3-36; (S) *Alpha Perform*, 11-8
 saving disk space, (P) *Rec Mgmt Util*, 2-10
 saving the queue database, (S) *Sys Mgr Essentials*, 12-11
 syntax, (S) *VMScluster Sys*, B-3
 using over the network, (S) *DECnet Intro*, 2-9
 using to change organization of file, (S) *Sys Mgr Essentials*, 9-19

Convert utility (CONVERT) (cont'd)

- using to merge SYSUAF.DAT files, (S)
 VMScluster Sys, B-2
- using with DECnet, (P) *Rec Mgmt Util*, 2-4
- using with Prolog 3 files, (P) *File Appl*, 3-20
- with corrupted files, (P) *File Appl*, 10-1, 10-2
- with FDL files, (P) *File Appl*, 4-2
- with Prolog 1 and Prolog 2 files, (P) *File Appl*, 3-19

Cooling equipment

- controlling temperature and humidity, (S)
 Dependable, 5-3

Coordinated Universal Time

- See UTC

COPY command, (G) *User*, 4-12; (G) *DCL A-M*, DCLI-78 to DCLI-87; (S) *Sys Mgr Essentials*, 10-23; (S) *Sys Mgr Tuning*, 21-14; (P) *Alpha SDA*, SDA-5, SDA-39; (P) *VAX SDA*, SDA-5, SDA-7, SDA-47

- comparison with COPY command in System

- Dump Analyzer utility, (S) *Sys Mgr Tuning*, 15-15

- /CONTIGUOUS qualifier, (P) *File Appl*, 9-8, 10-27

- disk volumes, (S) *Sys Mgr Essentials*, 9-19

- in Mail, (G) *User*, 6-12

- in network operations, (S) *DECnet Intro*, 2-5

- in System Dump Analyzer utility, (S) *Sys Mgr Tuning*, 15-4, 15-15

- printing from a private volume, (G) *User*, 12-2

- restriction for copying dump files, (S) *Sys Mgr Tuning*, 15-15

- security profile assigned, (S) *Security*, 5-11

- sending message after file is copied, (S) *Sys Mgr Essentials*, 9-22

- /SINCE qualifier, (G) *User*, 4-12

- standard-labeled volumes

- copying from, (S) *Sys Mgr Essentials*, 9-20

- tape volumes

- copying files from, (S) *Sys Mgr Essentials*, 9-21
 - copying files to, (S) *Sys Mgr Essentials*, 9-20, 9-21

- transferring information, (S) *Sys Mgr Essentials*, 9-19

- using for remote files, (S) *DECnet Intro*, 2-5

- using with DECwindows compound documents, (G) *DCL A-M*, DCLI-79

COPY/FTP command, (S) *TCP/IP*, 3-4, 5-6

Copying a handle, (P) *DECthreads*, cma-42

Copying a software kit, (S) *Sys Mgmt Util M-Z*, 3-7

Copying directories

- with BACKUP, (S) *Sys Mgr Essentials*, 10-23

Copying directory files, (G) *DCL A-M*, DCLI-80

Copying files, (G) *User*, 4-12

- between nodes, (G) *User*, 4-12

- dump files, (S) *Sys Mgr Tuning*, 15-14

Copying files (cont'd)

- methods for, (S) *Sys Mgr Essentials*, 9-19

- over the network, (S) *DECnet Intro*, 2-5, 3-30

- restrictions when using Mail, (G) *User*, 4-13

- to and from a remote host, (S) *Sys Mgr Tuning*, 21-14

- using COPY command, (S) *Sys Mgr Essentials*, 9-19

- using Exchange utility, (S) *Sys Mgr Essentials*, 9-24

- using Mail, (G) *User*, 4-13

- with BACKUP, (S) *Sys Mgr Essentials*, 10-23

Copying node database, (S) *DECnet Mgmt*, 1-14, 2-5, 3-17, 3-21

Copying software product release notes, (S) *Sys Mgr Essentials*, 3-29

COPY KNOWN NODES command, (S) *DECnet Mgmt*, 3-17; (S) *DECnet Mgmt Util*, 3-36

/COPY qualifier

- in Mount utility, (S) *Sys Mgmt Util M-Z*, 2-17

COPY/RCP command, (S) *TCP/IP*, 3-4, 5-7

copysign routine, (P) *Portable Math*, DPML-20, B-4

Copy strings, (P) *OTS\$, OTS*-87

CORBA (Common Object Request Broker Architecture), (G) *SW Overview*, 6-15

- ObjectBroker compliance, (P) *Environment*, 3-6

Core image file, (P) *File Appl*, 1-8

- CORIMG.SYS, (S) *Sys Mgr Tuning*, A-9

- not supported by OpenVMS, (S) *Sys Mgr Tuning*, A-9

CORIMG.SYS file, (P) *File Appl*, 1-8

- See also Core image file

Corrective action, (S) *DECcmds*, 2-8

cosd routine, (P) *Portable Math*, DPML-21, B-5

cosh routine, (P) *Portable Math*, DPML-22, B-5

Cosine

- hyperbolic, (P) *MTH\$, MTH*-50, MTH-88

- in degrees, (P) *MTH\$, MTH*-48, MTH-87, MTH-128

- in radians, (P) *MTH\$, MTH*-46, MTH-86

- of complex number, (P) *MTH\$, MTH*-26, MTH-28

cos routine, (P) *Portable Math*, DPML-21, B-5

Costs

- circuit, (S) *DECnet Intro*, 1-3; (S) *DECnet Mgmt*, 3-51

- control for circuit, (S) *DECnet Mgmt*, 2-22

- definition, (S) *DECnet Mgmt*, 2-21

- determining for circuit, (S) *DECnet Mgmt*, 3-51

- equal cost path splitting, (S) *DECnet Mgmt*, 2-22, 3-53

Cost tradeoffs, (S) *Dependable*, 4-16

cotd routine, (P) *Portable Math*, DPML-23, B-5

cot routine, (P) *Portable Math*, DPML-23, B-5

- Counters, (S) *Sys Mgmt Util A-L*, 13-3
 - circuit, (S) *DECnet Mgmt*, 3-35; (S) *DECnet Mgmt Util*, 3-120, B-1, B-4
 - displaying
 - for links, (S) *Sys Mgmt Util A-L*, 13-42
 - for nodes, (S) *Sys Mgmt Util A-L*, 13-47
 - for ports, (S) *Sys Mgmt Util A-L*, 13-52
 - for services, (S) *Sys Mgmt Util A-L*, 13-57
 - frequency of logging, (S) *DECnet Intro*, 4-4
 - line, (S) *DECnet Mgmt*, 3-48; (S) *DECnet Mgmt Util*, 3-161, B-7
 - logging, (S) *DECnet Mgmt*, 3-21
 - network use of, (S) *DECnet Intro*, 4-3
 - node, (S) *DECnet Mgmt*, 3-21; (S) *DECnet Mgmt Util*, 3-160, 3-162, 3-164, B-11
 - resetting, (S) *Sys Mgmt Util A-L*, 13-60
 - resetting to zero, (S) *DECnet Intro*, 4-3
 - status of LAT node, (S) *Sys Mgr Tuning*, 24-9
 - summary of network, (S) *DECnet Mgmt Util*, B-1
 - X.25 protocol module, (S) *DECnet Mgmt Util*, B-13
 - X.25 server module, (S) *DECnet Mgmt Util*, B-14
 - zeroing, (S) *DECnet Mgmt*, 3-21
- COUNTERS class
 - adding, (S) *Sys Mgmt Util M-Z*, 4-15
 - fields belonging to, (S) *Sys Mgmt Util M-Z*, 4-22
 - removing, (S) *Sys Mgmt Util M-Z*, 4-43
- Counter timers, (S) *DECnet Mgmt*, 3-21
 - expiration of, (S) *DECnet Intro*, 4-4
- Count field
 - for variable-length records, (P) *File Appl*, 2-9
- Counting semaphores, (P) *Concepts*, 14-28
- cpow routine, (P) *Portable Math*, DPML-24, B-6
- CPU context
 - changing, (P) *Alpha SDA*, SDA-73; (P) *VAX SDA*, SDA-95
 - SDA current, (P) *VAX SDA*, SDA-72
 - using the SET PROCESS command, (P) *VAX SDA*, SDA-78
 - using the SHOW CPU command, (P) *VAX SDA*, SDA-95
 - using the SHOW CRASH command, (P) *VAX SDA*, SDA-99
 - using the SHOW PROCESS command, (P) *VAX SDA*, SDA-148
 - displaying, (P) *Alpha SDA*, SDA-86; (P) *VAX SDA*, SDA-95
 - using SET CPU to change, (P) *Alpha SDA*, SDA-68
 - using SHOW CPU to change, (P) *Alpha SDA*, SDA-86
 - using SHOW CRASH to change, (P) *Alpha SDA*, SDA-89
 - using SHOW PROCESS to change, (P) *Alpha SDA*, SDA-127
- CPUDEFAULT process limit
 - choosing a value for batch queues, (S) *Sys Mgr Essentials*, 13-31
 - specifying a value for batch queues, (S) *Sys Mgr Essentials*, 13-19, 13-29
- CPU identification number, (S) *Sys Mgr Tuning*, 26-2; (P) *Alpha SDA*, SDA-86; (P) *VAX SDA*, SDA-95
 - See CPU ID
- CPU keyword
 - determining the host architecture, (G) *Compatibility*, 4-13
- CPULOA.EXE file
 - global symbols, (P) *VAX SDA*, SDA-64
- CPUMAXIMUM process limit
 - choosing a value for batch queues, (S) *Sys Mgr Essentials*, 13-31
 - specifying a value for batch queues, (S) *Sys Mgr Essentials*, 13-19, 13-29
- CPU Modes Summary window, (S) *DECamds*, 3-2 to 3-4
- CPU process limit, (S) *Sys Mgr Essentials*, 6-42
- CPUs (central processing units), (G) *SW Overview*, 1-4, 1-7
 - adding capacity, (S) *VAX Perform*, 4-36; (S) *Alpha Perform*, 15-3, 19-2
 - affected by swapping, (S) *VAX Perform*, 3-25; (S) *Alpha Perform*, 10-6
 - assessing relative load, (S) *Alpha Perform*, 9-11
 - capability, (S) *DECamds*, 3-3
 - classes, (S) *DECamds*, 5-9
 - compensating for limitations, (S) *VAX Perform*, 5-16
 - CPU identifier (ID), (S) *DECamds*, 3-3
 - default data collection, (S) *DECamds*, 5-2
 - defining maximum time limit for batch jobs, (G) *DCL A-M*, DCLI-263, DCLI-278; (G) *DCL N-Z*, DCLII-197, DCLII-369
 - determining when capacity is reached, (S) *VAX Perform*, 4-36; (S) *Alpha Perform*, 15-3
 - displaying error count for, (G) *DCL N-Z*, DCLII-280
 - equitable sharing, (S) *VAX Perform*, 3-13; (S) *Alpha Perform*, 9-6
 - error messages, (S) *DECamds*, 3-5
 - estimating available capacity, (S) *VAX Perform*, 3-11
 - evaluating responsiveness, (S) *VAX Perform*, 3-9
 - filter categories, (S) *DECamds*, 5-6
 - filtering data, (S) *DECamds*, 5-6
 - function, (S) *VAX Perform*, 3-9
 - identification for downline load, (S) *DECnet Mgmt*, 4-10
 - improving
 - performance by suspending, (S) *DECamds*, 4-6

CPUs (central processing units)

improving (cont'd)

response, (S) *DECamds*, 5-11

improving responsiveness, (S) *VAX Perform*, 3-13

inequitable sharing, (S) *Alpha Perform*, 9-6

isolating limitations, (S) *VAX Perform*, 4-32

limitations

isolating, (S) *Alpha Perform*, 15-1

limiting time for batch jobs, (G) *DCL A-M*, DCLI-263; (G) *DCL N-Z*, DCLII-135, DCLII-197, DCLII-369, DCLII-407

load balancing in a VMScluster, (S) *Alpha Perform*, 9-11

load balancing in VAXcluster, (S) *VAX Perform*, 3-19

load in gathering data, (S) *DECamds*, 2-4

modes, (S) *DECamds*, 3-3, 3-14

multiple, (S) *Dependable*, 4-5

number active on a node, (S) *DECamds*, 3-14

offloading, (S) *VAX Perform*, 3-18; (S) *Alpha Perform*, 9-10

on a network, (S) *Alpha Perform*, 9-10

peak usage, (S) *DECamds*, 3-4

percentage used, (S) *DECamds*, 3-3

power in LAT environment, (S) *Sys Mgmt Util A-L*, 13-28

process

identifier (PID), (S) *DECamds*, 3-3, 3-5

name in, (S) *DECamds*, 3-3

priority, (S) *DECamds*, 3-5

state queues, (S) *DECamds*, 3-14

time, (S) *DECamds*, 3-5

processor modes, (S) *Alpha Perform*, 9-7

program counter, (S) *DECamds*, 3-21

reducing consumption, (S) *Alpha Perform*, 9-7

reducing resource consumption, (S) *VAX Perform*, 3-14

setting process priorities, (S) *DECamds*, 4-4

single process mode rate, (S) *DECamds*, 3-23

SMP configurations, (S) *Dependable*, 4-4

state, (S) *DECamds*, 3-3, 3-5

time

limit (CPULM) for single process modes, (S) *DECamds*, 3-24

rate, (S) *DECamds*, 3-4, 3-5

time requirements, (S) *DECnet Mgmt*, 5-32

time spent in compatibility mode, (S) *VAX Perform*, 4-36

time spent in supervisor mode, (S) *VAX Perform*, 4-36; (S) *Alpha Perform*, 15-3

time used by current process, (G) *DCL N-Z*, DCLII-333

use, (S) *DECamds*, 3-2, 3-4

display of, (S) *DECamds*, 2-3

wait state, (S) *DECamds*, 3-5

CPU-specific pages, (P) *Concepts*, 20-1

See also Pages

CPU Summary window, (S) *DECamds*, 3-4 to 3-5

CPU time, (P) *Rec Mgmt Util*, 2-17

CRASH console command, (S) *Sys Mgr Essentials*, 4-27

Crash dump files

headers, (P) *VAX SDA*, SDA-113

Crash dumps, (S) *Sys Mgr Tuning*, 15-2

See also System dump files and System failures
comparison of physical and selective, (S) *Sys Mgr Tuning*, 15-3

file headers, (P) *Alpha SDA*, SDA-99; (P) *VAX SDA*, SDA-113

freeing page file of, (S) *Sys Mgr Tuning*, 15-16

headers, (P) *Alpha SDA*, SDA-99

incomplete, (P) *Alpha SDA*, SDA-8; (P) *VAX SDA*, SDA-9

physical, (S) *Sys Mgr Tuning*, 15-3

releasing, (S) *Sys Mgr Tuning*, 15-16

requirements for saving, (S) *Sys Mgr Tuning*, 15-3

saving contents of page file on reboot, (S) *Sys Mgr Tuning*, 15-2

saving contents of system dump file on reboot, (S) *Sys Mgr Essentials*, 5-13

selective, (S) *Sys Mgr Tuning*, 15-3

short, (P) *Alpha SDA*, SDA-8; (P) *VAX SDA*, SDA-9

Crash Log Utility Extractor (CLUE), (G)

Compatibility, 1-11, 4-12, A-1; (S) *Sys Mgmt Util A-L*, 8-4; (P) *Environment*, 9-10

commands, (S) *Sys Mgmt Util A-L*, 8-5

DELETE command in, (S) *Sys Mgmt Util A-L*, 8-5

description, (S) *Sys Mgr Tuning*, 15-12

DIRECTORY command in, (S) *Sys Mgmt Util A-L*, 8-6

EXIT command in, (S) *Sys Mgmt Util A-L*, 8-7

exiting from, (S) *Sys Mgmt Util A-L*, 8-4

EXTRACT command in, (S) *Sys Mgmt Util A-L*, 8-7

HELP command in, (S) *Sys Mgmt Util A-L*, 8-8

invoking, (S) *Sys Mgmt Util A-L*, 8-4

SHOW command in, (S) *Sys Mgmt Util A-L*, 8-8

Crash Node fix, (S) *DECamds*, 4-4

/CRASH_DUMP qualifier, (P) *Alpha SDA*, SDA-7; (P) *VAX SDA*, SDA-9

CRBs (channel request blocks), (P) *Alpha SDA*, SDA-94; (P) *VAX SDA*, SDA-105

CRB symbol, (P) *VAX SDA*, SDA-17

CR character, (P) *Rec Mgmt Util*, 4-33

/CRC qualifier

as Backup utility input save-set qualifier, (S) *Sys Mgmt Util A-L*, 7-25

- /CRC qualifier (cont'd)
 - as Backup utility output save-set qualifier, (S) *Sys Mgmt Util A-L*, 7-25
- Create access
 - logical name tables, (S) *Security*, 5-16
 - volumes, (S) *Security*, 5-21
- CREATE command, (G) *User*, 4-11; (G) *DCL A-M*, DCLI-88 to DCLI-90; (P) *Rec Mgmt Util*, 5-3, 6-1; (P) *Alpha SDA*, SDA-4; (P) *VAX SDA*, SDA-4
- creating directories, (S) *Sys Mgr Essentials*, 9-20
 - limiting number of file versions, (S) *Sys Mgr Essentials*, 8-53
- /DIRECTORY qualifier, (G) *User*, 5-3, 5-7
- in Install utility, (S) *Sys Mgmt Util A-L*, 11-8
- in network operations, (S) *DECnet Intro*, 2-7
- in SYSGEN, (S) *Sys Mgmt Util M-Z*, 5-11
 - changing page, swap, and dump file sizes, (S) *Sys Mgr Tuning*, 15-26
 - creating page, swap, and dump files, (S) *Sys Mgr Tuning*, 15-18
- writing new file to tape volume, (S) *Sys Mgr Essentials*, 9-18
- CREATE/DIRECTORY command, (G) *DCL A-M*, DCLI-91 to DCLI-93
 - to specify UIC-based directory protection, (S) *Sys Mgr Essentials*, 9-12
- /CREATED qualifier
 - in Backup utility, (S) *Sys Mgmt Util A-L*, 7-26
- CREATE/FDL (Create/FDL utility)
 - See Create/FDL utility
- CREATE/FDL command, (G) *DCL A-M*, DCLI-94; (P) *RMS Ref*, A-20
 - /LOG qualifier, (P) *Rec Mgmt Util*, 5-4
- Create/FDL utility (CREATE/FDL), (P) *Environment*, 10-19; (P) *Rec Mgmt Util*, 5-2, 5-3, 6-3; (P) *File Appl*, 1-37, 4-2, 4-16
- maintaining files, (P) *File Appl*, 10-1
- Create file function, (P) *I/O User*, 1-23
 - directory entry creation, (P) *I/O User*, 1-25
- Create-if option, (P) *RMS Ref*, 3-1, A-12; (P) *File Appl*, 4-15, 4-31, 5-9
 - See also FAB\$V_CIF option
- CREATE LINK command
 - in LATCP, (S) *Sys Mgmt Util A-L*, 13-7
 - illegal SCSSYSTEMID system parameter, (S) *Sys Mgmt Util A-L*, 13-7
- CREATE LOG command
 - in LMCP, (S) *Sys Mgmt Util A-L*, 14-7
- \$CREATE macro, (P) *RMS Ref*, A-9
- Create Mailbox and Assign Channel system service
 - See SYS\$CREMBX system service
- CREATE/NAME_TABLE command, (G) *DCL A-M*, DCLI-95 to DCLI-98
- CREATE PORT command
 - in LATCP, (S) *Sys Mgmt Util A-L*, 13-9
- /CREATE qualifier, (P) *File Appl*, 4-10
- Create service, (P) *RMS Ref*, 3-1, RMS-10, A-12; (P) *File Appl*, 4-15, 5-9
 - condition values, (P) *RMS Ref*, RMS-20
 - contrasted with Open service, (P) *RMS Ref*, 3-1
 - control block input fields, (P) *RMS Ref*, RMS-11
 - control block output fields, (P) *RMS Ref*, RMS-15
 - for process-permanent files, (P) *File Appl*, 6-19
 - handling search list, (P) *RMS Ref*, RMS-11
 - program example, (P) *RMS Ref*, 3-2, A-12
 - specifying prolog level, (P) *RMS Ref*, RMS-19
 - using the create-if option, (P) *RMS Ref*, RMS-19
 - using the NAM block, (P) *RMS Ref*, RMS-16
 - using to create indexed files, (P) *RMS Ref*, RMS-19
- XAB override in various fields, (P) *RMS Ref*, RMS-11
- CREATE SERVICE command
 - in LATCP, (S) *Sys Mgmt Util A-L*, 13-14
- CREATE/TERMINAL command, (G) *DCL A-M*, DCLI-99 to DCLI-104
- Create-time attribute
 - establishing value, (P) *Rec Mgmt Util*, 4-2
- CREATE_IF attribute, (P) *Rec Mgmt Util*, 4-18; (P) *File Appl*, 4-31
- Creating
 - attributes object, (P) *DECthreads*, cma-11
 - condition variable attributes object, (P) *DECthreads*, pthread-24
 - disk file sections, (P) *Sys Svc I*, SYS1-156
 - logical names, (P) *Sys Svc I*, SYS1-120
 - logical name tables, (P) *Sys Svc I*, SYS1-126
 - mailboxes, (P) *Sys Svc I*, SYS1-132
 - processes, (P) *Sys Svc I*, SYS1-139
 - rights databases, (P) *Sys Svc I*, SYS1-114
 - thread attributes object, (P) *DECthreads*, pthread-3
 - user profiles, (P) *Sys Svc I*, SYS1-116
 - virtual address space, (P) *Sys Svc I*, SYS1-153
- Creating a disk usage accounting file, (S) *Sys Mgmt Util A-L*, 3-11
- Creating an additional queue manager, (S) *Sys Mgr Essentials*, 12-10
- Creating a new system parameter file
 - with SYSGEN, (S) *Sys Mgr Tuning*, 14-34
- Creating a PCF
 - before installation, (S) *Sys Mgr Essentials*, 3-22
 - during installation, (S) *Sys Mgr Essentials*, 3-30

- Creating a queue database, (S) *Sys Mgr Essentials*, 12-7
- Creating execution queues, (S) *Sys Mgr Essentials*, 13-15
 - autostart, (S) *Sys Mgr Essentials*, 13-15, 13-16
 - nonautostart, (S) *Sys Mgr Essentials*, 13-16
- Creating generic queues, (S) *Sys Mgr Essentials*, 13-17
- Creating groups, (S) *DECamds*, 1-7
- Creating log files
 - operator log file, (S) *Sys Mgr Tuning*, 18-22
- Creating page, swap, and dump files
 - with AUTOGEN, (S) *Sys Mgr Tuning*, 15-24
 - with SYSGEN, (S) *Sys Mgr Tuning*, 15-18
- Creating queues, (G) *DCL A-M*, DCLI-258
- CREATION attribute, (P) *Rec Mgmt Util*, 4-15
- Creation date field, (P) *File Appl*, 1-28
 - zero creation date, (P) *File Appl*, 1-29
- Creation of a network, (S) *DECnet Intro*, 3-1
- Creation-time options
 - contiguous space allocation, (P) *File Appl*, 3-12
 - defining file characteristics, (P) *File Appl*, 4-32
 - using RMS, (P) *File Appl*, 4-31
 - using the Edit/FDL utility, (P) *File Appl*, 4-2
- Creator ACEs, (S) *Security*, 5-11; (S) *Sys Mgmt Util A-L*, 1-9
 - example, (S) *Security*, 8-21
 - specifying access, (S) *Sys Mgmt Util A-L*, 1-10
 - specifying attributes, (S) *Sys Mgmt Util A-L*, 1-10
 - with resource identifiers, (S) *Security*, 8-10
- CREDITS class
 - adding, (S) *Sys Mgmt Util M-Z*, 4-17
 - fields belonging to, (S) *Sys Mgmt Util M-Z*, 4-23
 - removing, (S) *Sys Mgmt Util M-Z*, 4-43
- Cross-architecture booting, (G) *V6.2 New Feat*, 6-30; (S) *Sys Mgr Tuning*, 22-23
- Crossed cables, (S) *VMScluster Sys*, C-23
- Cross-reference section of image map files, (P) *Linker*, LINK-8
 - format, (P) *Linker*, 5-8
- Cross training personnel, (S) *Dependable*, 1-4
 - See also Comprehensive training
 - at CSC data center, (S) *Dependable*, 11-6
 - relationship to role boundaries, (S) *Dependable*, 5-7
- /CROSS_REFERENCE qualifier, (P) *Linker*, LINK-8
- CSBs (cluster system blocks), (P) *Alpha SDA*, SDA-80, SDA-84; (P) *VAX SDA*, SDA-86, SDA-91
- CSID (cluster system identification number), (P) *Alpha SDA*, SDA-80, SDA-140; (P) *VAX SDA*, SDA-86, SDA-161
- /CSID qualifier, (P) *Alpha SDA*, SDA-80; (P) *VAX SDA*, SDA-86
- csin routine, (P) *Portable Math*, DPML-25, B-6
- CSLIP (compressed serial line Internet protocol), (S) *TCP/IP*, 2-7
- CSMA/CD (Carrier Sense Multiple Access with Collision Detect), (S) *DECnet Mgmt*, 1-5
 - access control, (S) *DECnet Mgmt*, 1-4
- csqrt routine, (P) *Portable Math*, DPML-26, B-6
- CSR (Control and Status Register)
 - addresses, (S) *Sys Mgmt Util M-Z*, 5-7, 5-9
 - fixed space, (S) *Sys Mgmt Util M-Z*, D-1
 - floating space, (S) *Sys Mgmt Util M-Z*, D-1
 - vector addresses, (S) *Sys Mgmt Util M-Z*, 5-9
- CSR addresses
 - display on Alpha systems, (S) *Sys Mgmt Util M-Z*, 6-39; (S) *Comparison*, A-7
- CTDRIVER driver, (P) *I/O User*, 5-11, 5-37
- CTG option, (P) *Rec Mgmt Util*, 4-7, 4-18
- Ctrl/A key sequence, (G) *User*, 3-19
- Ctrl/B key sequence, (G) *User*, 3-14, 19-7; (S) *Security*, 3-15
 - recalling commands with, (G) *User*, 3-14, 3-19
- Ctrl/C key sequence, (G) *User*, 3-18; (P) *Concepts*, 7-32; (P) *Debugger*, 5-11, 14-5, 14-9
 - canceling Mail messages, (G) *User*, 6-5, 6-10
 - enabling or disabling, (G) *DCL N-Z*, DCLII-116
- Ctrl/E key sequence, (G) *User*, 3-19
- Ctrl keys, (G) *User*, 3-18
- CTRLNAME logical name, (S) *Sys Mgr Tuning*, 17-32
- Ctrl/O key sequence, (G) *DCL N-Z*, DCLII-418
- Ctrl/Q key sequence, (G) *DCL N-Z*, DCLII-418
- Ctrl/S key sequence, (G) *DCL N-Z*, DCLII-418
- Ctrl/T key sequence
 - checking the status of processes, (G) *User*, 2-21
 - displays Alpha CPU-specific page values, (S) *Comparison*, 5-9
 - enabling or disabling, (G) *DCL N-Z*, DCLII-116
 - interrupting DCL commands with, (G) *User*, 3-18
- Ctrl/U key sequence, (G) *User*, 3-17
- Ctrl/W key sequence
 - refreshing screen displays with, (G) *User*, 18-4
- Ctrl/x key sequence
 - See Terminals, control characters
- Ctrl/Y key sequence, (P) *Concepts*, 7-32; (P) *Debugger*, 2-7, 5-11, 5-13, 14-13
 - aborting remote sessions with, (G) *User*, 2-24
 - and EXIT command, (G) *DCL A-M*, DCLI-222
 - and login procedure, (G) *DCL A-M*, DCLI-410
 - and ON command, (G) *DCL N-Z*, DCLII-2
 - canceling command procedures, (G) *User*, 15-34
 - canceling DCL commands, (G) *User*, 3-18

- Ctrl/Y key sequence (cont'd)
- disabling, (G) *User*, 15-40
 - effects of entering, (G) *User*, 15-37
 - enabling, (G) *User*, 15-40
 - enabling or disabling, (G) *DCL N-Z*, DCLII-116
 - exiting, (G) *User*, 15-36
 - exiting from loops when disabled, (G) *User*, 15-40
 - interrupting command procedures, (G) *User*, 15-34
 - interrupting DCL commands, (G) *User*, 3-18
 - interrupting images with, (G) *User*, 18-4
 - interrupting tasks in debugger, (P) *Debugger*, 16-33
 - resuming an EDT editing session, (G) *User*, 9-9
 - setting action routines, (G) *User*, 15-36
 - using to abort remote session, (S) *DECnet Intro*, 3-3
- Ctrl/Z key sequence, (P) *Concepts*, 7-5, 9-31; (P) *File Appl*, 4-3; (P) *Debugger*, 5-10
- as end-of-file terminator, (G) *User*, 3-18, 4-11
 - sending files in Mail, (G) *User*, 6-10
 - sending Mail messages, (G) *User*, 6-5
 - using as end-of-file marker, (P) *RMS Ref*, RMS-51
 - using to terminate Get service, (P) *RMS Ref*, RMS-51
- %CURDISP built-in symbol, (P) *Debugger*, 11-24
- %CURLOC built-in symbol, (P) *Debugger*, 8-8, 8-13, B-6
- Current context, (P) *File Appl*, 8-15 to 8-18
- Current location symbol (.), (P) *VAX SDA*, SDA-17
- Current procedure, (P) *Concepts*, 13-48; (P) *Calling Std*, 3-29
- /CURRENT qualifier, (P) *Debugger*, 9-11, 11-6, 11-10, 11-11
- Current-record position, (P) *File Appl*, 8-3, 8-4
- Current stack pointer, (P) *Alpha SDA*, SDA-15
- Current system parameters, (S) *Sys Mgr Tuning*, 14-3
- %CURRENT_SCOPE_ENTRY built-in symbol, (P) *Debugger*, B-11
- %CURSCROLL built-in symbol, (P) *Debugger*, 11-24
- Cursors
- moving, (P) *Concepts*, 7-20; (P) *SMG\$*, 4-3
 - turning on and off, (P) *SMG\$*, SMG-355
- %CURVAL built-in symbol, (P) *Debugger*, 8-5, B-6
- Customization
- debugger, (P) *Debugger*, 11-13, 11-14, 11-19, 12-1, 12-4, 12-6, 12-8, 12-9
 - DECwindows Motif interface, (P) *Debugger*, 3-27
 - key bindings on keypad, (P) *Debugger*, 3-35
- Customizing
- effect on performance, (S) *DECamds*, 5-17
 - security files, (S) *DECamds*, 1-7
 - template customization files, (S) *DECamds*, 5-2
- Customizing DECamds, (S) *DECamds*, 5-1 to 5-2
- Customizing DECwindows Motif interface, (S) *Sys Mgr Essentials*, 3-39
- Customizing the system
- adding optional system files that have been removed from the system disk, (S) *Sys Mgr Essentials*, 5-1
 - building standalone BACKUP, (S) *Sys Mgr Essentials*, 5-49
 - creating site-specific startup command procedures, (S) *Sys Mgr Essentials*, 5-2
 - creating systemwide announcements, (S) *Sys Mgr Essentials*, 5-14
 - duplicating the system disk, (S) *Sys Mgr Essentials*, 2-26
 - enabling autostart, (S) *Sys Mgr Essentials*, 5-12
 - installing known images, (S) *Sys Mgr Essentials*, 5-12
 - installing resident images (Alpha), (S) *Sys Mgr Essentials*, 5-13
 - limiting the number of interactive users, (S) *Sys Mgr Essentials*, 5-16
 - making remote InfoServer devices available, (S) *Sys Mgr Tuning*, 23-14
 - making remote InfoServer disks available, (S) *Sys Mgr Essentials*, 5-13
 - modifying login procedures, (S) *Sys Mgr Essentials*, 5-16
 - modifying site-specific startup command procedures, (S) *Sys Mgr Essentials*, 5-2
 - rules, (S) *Sys Mgr Essentials*, 5-4
 - removing optional system files from the system disk, (S) *Sys Mgr Essentials*, 5-1
 - setting up a LAT network, (S) *Sys Mgr Essentials*, 5-15
 - starting InfoServer Client for OpenVMS, (S) *Sys Mgr Essentials*, 5-13; (S) *Sys Mgr Tuning*, 23-10
 - starting queues, (S) *Sys Mgr Essentials*, 5-12
 - starting the DECnet network, (S) *Sys Mgr Essentials*, 5-15
 - submitting batch jobs at system startup, (S) *Sys Mgr Essentials*, 5-14
- CVT\$CONVERT_FLOAT routine, (P) *LIB\$*, CVT-3
- CVT option, (P) *Rec Mgmt Util*, 4-14
- cvt_ftof routine, (P) *Portable Math*, DPML-27, B-6
- CXY08 device, (S) *DECnet Mgmt*, 2-7
- Cylinders, (P) *File Appl*, 1-10, 3-10
- boundary, (P) *File Appl*, 3-16
 - definition, (S) *Sys Mgr Tuning*, A-2

Cylinders (cont'd)

options for, (P) *File Appl*, 4-35

D

DAD virtual disk unit, (S) *Sys Mgr Tuning*, 23-12

DANs (data bucket area numbers)

program example, (P) *RMS Ref*, A-19

Data

aligning, (P) *Concepts*, 8-4

capturing, (S) *VMScluster Sys*, F-28

display, (S) *DECamds*, 2-4, 2-8

including in command procedures, (G) *User*, 16-2

interprocess, (P) *Concepts*, 17-6

link, (S) *DECamds*, 5-16

logical, (G) *User*, 14-18, 14-19, 14-20

shared access, (G) *Compatibility*, 4-2

sharing, (P) *Concepts*, 17-6

storing with audio information on CD-ROM, (P) *I/O User*, 2-24

thread-specific, (P) *DECthreads*, 2-14

transfer security, (S) *DECamds*, 1-4

writing to terminals, (G) *User*, 16-9

writing using the WRITE command, (G) *User*, 16-9

\$DATA\$ program section name

definition, (P) *Linker*, B-16

Data access

synchronization in mixed-architecture

VMScluster system, (G) *Compatibility*, 4-18, 4-19

Data alignment, (P) *Concepts*, 22-1; (P) *Calling Std*, 3-55

exception reporting, (P) *Concepts*, 13-15

specifying alignment of program sections, (P) *Linker*, 3-4

Data Analyzer, (S) *DECamds*, 1-1, Glossary-1

access for Data Providers, (S) *DECamds*, 1-4

AMDS\$CONSOLE_ACCESS.DAT file, (S) *DECamds*, 1-4

data exchange with Data Provider, (S) *DECamds*, 1-8

files used for, (S) *DECamds*, B-1

log files, (S) *DECamds*, B-4

security file, (S) *DECamds*, A-14

setting up after installing, (S) *DECamds*, A-14

starting, (S) *DECamds*, 2-1, A-15

system directory definition, (S) *DECamds*, A-14

typical setup, (S) *DECamds*, 1-2

user account privileges and quotas, (S) *DECamds*, A-14

Data availability

See Availability

Databases

See also Configuration databases and Queue database

Databases (cont'd)

accessing when public, (S) *DECnet Intro*, 2-5

authorization, (S) *Security*, 2-4, 2-6

circuit, (S) *DECnet Mgmt*, 3-1

clearing permanent values, (S) *DECnet Mgmt Util*, 3-2

creating volatile or permanent parameters, (S) *DECnet Mgmt Util*, 3-57

loading volatile area with all permanent parameters, (S) *DECnet Mgmt Util*, 3-56

resetting volatile parameters to default, (S) *DECnet Mgmt Util*, 3-2

setting volatile or permanent parameters, (S) *DECnet Mgmt Util*, 3-57

clearing or purging before copying node entries, (S) *DECnet Mgmt*, 3-18

clearing selected permanent parameters, (S) *DECnet Mgmt Util*, 3-6

compressing, (P) *Util Routines*, DCX-1

copying node, (S) *DECnet Mgmt*, 1-14, 2-5, 3-17, 3-21

copying remote node data, (S) *DECnet Mgmt Util*, 3-36

creating (volatile node), (S) *DECnet Intro*, 3-18

creating volatile or permanent parameters, (S) *DECnet Mgmt Util*, 3-64

data integrity, (G) *SW Overview*, 2-13

DECnet, (S) *DECnet Mgmt*, 1-14

DECnet configuration, (S) *DECnet Intro*, 3-10

default object, (S) *DECnet Intro*, 3-10

dependability features, (S) *Dependable*, 8-35 to 8-50

distributed tools, (G) *SW Overview*, 7-17

Ethernet configurator module

clearing permanent values of a specified circuit, (S) *DECnet Mgmt Util*, 3-20

creating volatile or permanent parameters, (S) *DECnet Mgmt Util*, 3-90

executor node

clearing volatile or permanent loop node and circuit values, (S) *DECnet Mgmt Util*, 3-111

creating volatile or permanent network control parameters, (S) *DECnet Mgmt Util*, 3-64

loading volatile area with all permanent parameters, (S) *DECnet Mgmt Util*, 3-63, 3-85

setting volatile or permanent network control values, (S) *DECnet Mgmt Util*, 3-64

expanding, (P) *Util Routines*, DCX-8

host node

accessing X.25 target node parameters, (S) *DECnet Mgmt Util*, 3-21

interoperability, (G) *SW Overview*, 7-18

LAT database, (S) *Sys Mgr Tuning*, 24-8

Databases (cont'd)

- line, (S) *DECnet Mgmt*, 3-1
 - clear and load volatile parameters with permanent data, (S) *DECnet Mgmt Util*, 3-76
 - clearing all values, (S) *DECnet Mgmt Util*, 3-12
 - creating parameters, (S) *DECnet Mgmt Util*, 3-77
 - resetting volatile parameters to default, (S) *DECnet Mgmt Util*, 3-12
 - setting parameters, (S) *DECnet Mgmt Util*, 3-77

LMF

- use in system startup, (S) *Sys Mgr Essentials*, 5-5

logging, (S) *DECnet Mgmt*, 3-1

- clearing event-source values, (S) *DECnet Mgmt Util*, 3-17
- clearing sink-name, (S) *DECnet Mgmt Util*, 3-19
- clearing volatile data, (S) *DECnet Mgmt Util*, 3-16
- creating event-sink parameters, (S) *DECnet Mgmt Util*, 3-88
- creating event-source parameters, (S) *DECnet Mgmt Util*, 3-86
- resetting event-source values, (S) *DECnet Mgmt Util*, 3-17
- resetting volatile data, (S) *DECnet Mgmt Util*, 3-16
- setting event-sink parameters, (S) *DECnet Mgmt Util*, 3-88
- setting event-source parameters, (S) *DECnet Mgmt Util*, 3-86

loop node

- clearing volatile or permanent values on executor node, (S) *DECnet Mgmt Util*, 3-31
- creating volatile or permanent parameters, (S) *DECnet Mgmt Util*, 3-111
- setting volatile or permanent values, (S) *DECnet Mgmt Util*, 3-111

management systems, (G) *SW Overview*, 7-15

memory-resident (volatile), (S) *DECnet Intro*, 3-34

module, (S) *DECnet Mgmt*, 3-1

network

- permanent, (S) *Sys Mgr Tuning*, 21-11
- volatile, (S) *Sys Mgr Tuning*, 21-11

node, (S) *DECnet Intro*, 3-8; (S) *DECnet Mgmt*, 3-1

- clearing volatile or permanent values, (S) *DECnet Mgmt Util*, 3-27
- creating volatile or permanent parameters, (S) *DECnet Mgmt Util*, 3-106
- setting volatile or permanent values, (S) *DECnet Mgmt Util*, 3-106

Databases (cont'd)

- object, (S) *DECnet Mgmt*, 3-2
 - creating volatile or permanent parameters, (S) *DECnet Mgmt Util*, 3-113
 - loading volatile area with all permanent parameters, (S) *DECnet Mgmt Util*, 3-112
 - setting volatile or permanent values, (S) *DECnet Mgmt Util*, 3-113
- of software products, (S) *Sys Mgr Essentials*, 3-20
- on OpenVMS Alpha systems, (G)
 - Compatibility*, 1-2, 3-4
- permanent, (S) *DECnet Intro*, 3-10, 3-11, 3-35; (S) *DECnet Mgmt*, 1-13, 3-2, 5-34
- products, (G) *SW Overview*, 4-19
- protected objects, (S) *Security*, 11-6
- proxy

- clear and load volatile area with all permanent parameters, (S) *DECnet Mgmt Util*, 3-75

RDO utility as prototyping tool, (S) *Dependable*, 8-33

record, (P) *Concepts*, 8-12

relational, (G) *SW Overview*, 7-15

replication across wide area networks, (S) *Dependable*, 3-6

resetting selected volatile parameters to default, (S) *DECnet Mgmt Util*, 3-6

setting volatile or permanent parameters, (S) *DECnet Mgmt Util*, 3-64

standards, (G) *SW Overview*, A-2

startup

- definition, (S) *Sys Mgr Essentials*, 5-18
- layered product, (S) *Sys Mgr Essentials*, 5-18, 5-19
- OpenVMS, (S) *Sys Mgr Essentials*, 5-18
- order of startup events, (S) *Sys Mgr Essentials*, 5-4

updating all volatile or permanent data, (S) *DECnet Mgmt Util*, 3-36

volatile, (S) *DECnet Intro*, 3-10, 3-26; (S) *DECnet Mgmt*, 1-13, 3-2

volatile network, (S) *Security*, 12-16

X.25 network connector-node access

- clearing volatile or permanent names and parameters, (S) *DECnet Mgmt Util*, 3-21
- for host node, (S) *DECnet Mgmt Util*, 3-21, 3-92

X.25 or X.29 server module

- clearing volatile or permanent call handler values, (S) *DECnet Mgmt Util*, 3-25
- creating volatile or permanent call handler parameters, (S) *DECnet Mgmt Util*, 3-100
- resetting volatile or permanent call handler values, (S) *DECnet Mgmt Util*, 3-25

Databases

X.25 or X.29 server module (cont'd)

- setting volatile or permanent call handler values, (S) *DECnet Mgmt Util*, 3-100

X.25 protocol module

- clearing volatile or permanent values, (S) *DECnet Mgmt Util*, 3-22
- creating volatile or permanent parameters, (S) *DECnet Mgmt Util*, 3-94
- resetting volatile parameters to default, (S) *DECnet Mgmt Util*, 3-22
- setting volatile or permanent values, (S) *DECnet Mgmt Util*, 3-94

Database support, (P) *Environment*, 3-3

- distributed applications, (P) *Environment*, 3-5
- SQL, (P) *Environment*, 2-5

Data blocks

partially recorded

- ISO 9660 standard, (S) *Sys Mgr Essentials*, 8-5

Data bucket, (P) *Rec Mgmt Util*, 4-26

Data bucket area numbers

- See DANs

Data bucket fill size

- See DFL

DATA BUCKET structure, (P) *File Appl*, 10-15, 10-18

Data card deck, (S) *Sys Mgr Essentials*, 7-18

Data Center Monitor

- See DCM

Data centers

- backup procedures, (S) *Dependable*, 9-14
- Business Recovery Server, (G) *SW Overview*, 2-14, 7-10
- evaluation checklists, (S) *Dependable*, A-3 to A-20
- locking the computer, (S) *Dependable*, 3-5
- management techniques, (S) *Dependable*, 9-1
- managing, (G) *SW Overview*, 2-14, 7-4
- operations overview, (S) *Dependable*, 9-8
- security policies, (S) *Dependable*, 9-19
- software environment, (S) *Dependable*, 9-14

Data checks

- changing default, (G) *DCL N-Z*, DCLII-235
- disk, (P) *I/O User*, 2-12, 2-32, 2-33
- magnetic tape, (P) *I/O User*, 3-6, 3-14, 3-15

Data collection

- by AUTOGEN, (S) *Sys Mgmt Util A-L*, 6-6

DATA command, (S) *DECnet Mgmt Util*, 4-6

Data compaction

- TA90E support, (S) *Sys Mgmt Util A-L*, 7-46
- volume mount, (S) *Sys Mgmt Util M-Z*, 2-24

Data compression, (P) *File Appl*, 3-19

- See also DCX routines

- algorithm for submitting all data records, (P) *Util Routines*, DCX-16

Data compression (cont'd)

- analysis preceding compression, (P) *Util Routines*, DCX-14
- size of data after compression, (P) *Util Routines*, DCX-1

Data Compression facility routines

- See DCX routines

Data Distributor, (G) *SW Overview*, 7-18

- use in wide area networks, (S) *Dependable*, 3-6

Data errors

- recovery from, (S) *Dependable*, 8-22t

Data expansion, (P) *Util Routines*, DCX-23

- initializing, (P) *Util Routines*, DCX-26

Data Expansion facility routines

- See DCX routines

Data field, (S) *Sys Mgmt Util M-Z*, 4-3

Data files

- creating, (P) *Rec Mgmt Util*, 2-1, 6-1; (P) *File Appl*, 4-15
- creating with FDL\$CREATE routine, (P) *File Appl*, 4-13, 4-16
- including programs in, (G) *User*, 16-8
- reorganizing, (P) *File Appl*, 10-27

Data filtering

- See Filtering

Datagram Exchange protocol

- See DX protocol

Datagrams, (S) *VMScluster Sys*, F-17 to F-26; (S) *TCP/IP*, 1-2

- CCSTART, (S) *VMScluster Sys*, F-17

- Ethernet, (S) *DECnet Mgmt*, 1-4

- Ethernet headers, (S) *VMScluster Sys*, F-21

- retransmission problems, (S) *VMScluster Sys*, F-18

- VACK, (S) *VMScluster Sys*, F-17

Data integrity

- checking, (S) *DECnet Mgmt Util*, 4-7

- DECdtm, (G) *SW Overview*, 7-13

- production systems, (G) *SW Overview*, 7-4

- software tools, (G) *SW Overview*, 2-13, 7-4

Data interleaving

- ISO 9660, (S) *Sys Mgr Essentials*, 8-6

Data levels

- comparing for primary and alternate keys, (P) *RMS Ref*, 12-4

Data link

- creating with LATCP, (S) *Sys Mgmt Util A-L*, 13-7

- modifying LAT characteristics of, (S) *Sys Mgmt Util A-L*, 13-26

- number supported by LAT software, (S) *Sys Mgmt Util A-L*, 13-9

Data Link layer

- control, (S) *DECnet Mgmt*, 2-4

- events, (S) *DECnet Mgmt Util*, D-9

- problems, (S) *DECnet Intro*, 4-13

- Data loss
 - avoiding by dismounting volume, (S) *Sys Mgr Essentials*, 8-44
- Data management, (G) *SW Overview*, 4-18
- Data message length, (S) *DECnet Mgmt Util*, 4-6, 4-11
- Data packet transmissions
 - and circuit counters, (S) *DECnet Intro*, 4-3
- Data packing, (G) *Compatibility*, 4-2
- Data parity
 - dependability features, (S) *Dependable*, 8-26
- Data passing
 - for Alpha systems, (P) *Calling Std*, 3-48
 - unused bits, (P) *Calling Std*, 3-50
- Data Provider, (S) *DECamds*, 1-1, Glossary-1
 - access for Data Analyzers, (S) *DECamds*, 1-4
 - AMDS\$DRIVER_ACCESS.DAT file, (S) *DECamds*, 1-4
 - data exchange with Data Analyzer, (S) *DECamds*, 1-8
 - files, (S) *DECamds*, B-3
 - restarting, (S) *DECamds*, 1-8
 - restrictions, (S) *DECamds*, 1-2
 - security file, (S) *DECamds*, A-13
 - setting up after installation, (S) *DECamds*, A-13
 - starting, (S) *DECamds*, A-14
- Data record compaction, (G) *DCL A-M*, DCLI-254
- TA90E support, (G) *DCL N-Z*, DCLII-171
- Data records, (P) *Rec Mgmt Util*, 1-3, 4-5
 - analysis, (P) *Util Routines*, DCX-12
 - compression, (P) *Util Routines*, DCX-1
 - conversion, (P) *Util Routines*, CONV-1
 - expansion, (P) *Util Routines*, DCX-1
- Data reliability, (P) *File Appl*, 9-10
- Data storage
 - file organization and, (P) *File Appl*, 3-2
- Data streams
 - marking beginning of, (G) *DCL A-M*, DCLI-112
 - marking end of, (G) *DCL A-M*, DCLI-206
- Data structures, (P) *Rec Mgmt Util*, 1-1
 - cma_t_once, (P) *DECthreads*, cma-55
 - displaying at next higher level, (P) *Rec Mgmt Util*, 1-23
 - FABs (file access blocks), (P) *Environment*, 10-16
 - formatting, (P) *Alpha SDA*, SDA-53; (P) *VAX SDA*, SDA-60
 - global symbols, (P) *Alpha SDA*, SDA-15; (P) *VAX SDA*, SDA-64
 - NAMs (name blocks), (P) *Environment*, 10-16
 - pthread_once_t, (P) *DECthreads*, pthread-63
 - RABs (record access blocks), (P) *Environment*, 10-16
 - stepping through a linked list, (P) *Alpha SDA*, SDA-64; (P) *VAX SDA*, SDA-68
 - XABs (extended attribute blocks), (P) *Environment*, 10-16
- Data terminal equipment
 - See DTE
- Data tests, (S) *DECnet Mgmt Util*, 4-6
- Data throughput
 - enhanced with multiple adapters, (S) *VMScluster Sys*, 3-5
- Data transfer mode
 - as controlled by the generic SCSI class driver, (P) *I/O User*, 8-6, 8-12
 - asynchronous, (P) *I/O User*, 8-6, 8-12
 - synchronous, (P) *I/O User*, 8-6, 8-12
- Data transmission media, (S) *DECnet Intro*, 1-6
- DATATRIEVE, (G) *SW Overview*, 7-17
 - prototyping tool, (S) *Dependable*, 8-32
- Data types, (P) *Interfaces*, 1-7, B-1; (P) *Calling Std*, 4-1; (P) *File Appl*, 3-19
 - See also Types
 - Ada declarations, (P) *Interfaces*, B-16
 - APL declarations, (P) *Interfaces*, B-19
 - atomic, (P) *Calling Std*, 4-1 to 4-3
 - BASIC declarations, (P) *Interfaces*, B-21
 - BLISS declarations, (P) *Interfaces*, B-24
 - C declarations, (P) *Interfaces*, B-27
 - COBOL declarations, (P) *Interfaces*, B-30
 - code, (P) *Calling Std*, 4-6, 4-7
 - compatibility in mixed-architecture VMScluster system, (G) *Compatibility*, 4-17, 4-19
 - D_float floating-point, (G) *Compatibility*, 1-12
 - Fortran declarations, (P) *Interfaces*, B-33
 - G_float floating-point, (G) *Compatibility*, 1-12
 - H_float floating-point, (G) *Compatibility*, 1-12, 4-2
 - MACRO declarations, (P) *Interfaces*, B-37
 - miscellaneous, (P) *Calling Std*, 4-5 to 4-6
 - not supported, (G) *Compatibility*, 1-12
 - OpenVMS, (P) *Interfaces*, B-1, B-2
 - OpenVMS standard, (P) *Interfaces*, 1-7
 - OpenVMS usage, (P) *Interfaces*, 1-6
 - Pascal declarations, (P) *Interfaces*, B-40
 - PL/I declarations, (P) *Interfaces*, B-43
 - RPG II declarations, (P) *Interfaces*, B-49
 - SCAN declarations, (P) *Interfaces*, B-51
 - strings, (P) *Calling Std*, 4-4 to 4-5
 - symbolic code, (P) *Interfaces*, 1-7
 - using lexical functions with, (G) *User*, 17-16
 - varying character string, (P) *Calling Std*, 4-7
- Data windows, (S) *DECamds*, Glossary-1
 - See also specific window names
 - CPU Modes Summary, (S) *DECamds*, 3-2
 - CPU Summary, (S) *DECamds*, 3-4
 - Disk Status Summary, (S) *DECamds*, 3-5
 - Disk Volume Summary, (S) *DECamds*, 3-7
 - hierarchy, (S) *DECamds*, 3-2
 - Lock Contention Summary, (S) *DECamds*, 3-8
 - Memory Summary, (S) *DECamds*, 3-10
 - Node Summary, (S) *DECamds*, 3-12
 - overview, (S) *DECamds*, 3-1

Data windows (cont'd)

- Page/Swap File Summary, (S) *DECams*, 3-15
- Process I/O Summary, (S) *DECams*, 3-16
- Single Lock Summary, (S) *DECams*, 3-18
- Single Process Summary, (S) *DECams*, 3-20
- DATA_AREA attribute, (P) *Rec Mgmt Util*, 4-26, 4-27; (P) *File Appl*, 3-25
- /DATA_CHECK qualifier
 - in Mount utility, (S) *Sys Mgmt Util M-Z*, 2-18
- DATA_FILL attribute, (P) *Rec Mgmt Util*, 4-4, 4-26
- DATA_KEY_COMPRESSION attribute, (P) *Rec Mgmt Util*, 4-4, 4-26
- DATA_RECORD_COMPRESSION attribute, (P) *Rec Mgmt Util*, 4-4, 4-26
- DATA_RECORD_COUNT attribute, (P) *Rec Mgmt Util*, 4-5
- DATA_SPACE_OCCUPIED attribute, (P) *Rec Mgmt Util*, 4-5
- DATE attribute, (P) *Rec Mgmt Util*, 4-15
- Date format
 - selecting for SHOW command, (G) *V6.2 New Feat*, 3-19
- Date formats, (S) *Sys Mgr Essentials*, 5-42
 - predefined, (S) *Sys Mgr Essentials*, 5-47
 - specifying, (S) *Sys Mgr Essentials*, 5-45
- Date-information option, (P) *File Appl*, 4-32
- DATE primary, (P) *File Appl*, 4-32
- Dates
 - See also Time
 - 64-bit system format, (P) *Concepts*, 5-1
 - 128-bit system format, (P) *Concepts*, 5-34
 - changing system, (G) *DCL N-Z, DCLII-229*
 - displaying, (G) *DCL N-Z, DCLII-347*
 - displaying in a VMScLuster, (S) *Sys Mgmt Util M-Z*, 6-18
 - getting current system, (P) *Concepts*, 5-10
 - Smithsonian base, (P) *Concepts*, 5-1
 - specifying absolute and delta date and time combinations, (G) *User*, 3-13
 - specifying absolute date and time, (G) *User*, 3-11
 - specifying delta date and time, (G) *User*, 3-12
- Date/time manipulation
 - converting, (P) *Concepts*, 5-7
- Date/Time routines
 - LIB\$DATE_TIME, (P) *LIB\$, LIB-85*
 - LIB\$DAY, (P) *LIB\$, LIB-86*
 - LIB\$DAY_OF_WEEK, (P) *LIB\$, LIB-88*
- date_time data type, (P) *Interfaces*, B-6
- DAT_NCMR option, (P) *Rec Mgmt Util*, 4-26
- Daylight saving time
 - changing your time differential factor (TDF) for, (S) *Sys Mgr Essentials*, 5-35
- DAYLIGHT_SAVINGS.COM command procedure, (S) *Sys Mgr Essentials*, 5-35

Days

- setting primary, (G) *DCL N-Z, DCLII-118*
- setting secondary, (G) *DCL N-Z, DCLII-118*
- DBBFs (detected bad block files), (S) *Sys Mgr Essentials*, 8-65
- DBG\$DECW\$DISPLAY logical name, (P) *Debugger*, 2-8, 2-10, 5-14, B-1
- DBG\$INIT logical name, (P) *Debugger*, 12-4, B-1
- DBG\$INPUT logical name, (P) *Debugger*, 2-9, 13-6, B-1
- DBG\$OUTPUT logical name, (P) *Debugger*, 2-9, 13-6, B-1
- DBG\$PROCESS logical name, (P) *Debugger*, 5-14, 14-1, 14-10, B-1
- DBG_INIT boot flag, (S) *Comparison*, 2-11
- DBIN key types, (P) *Rec Mgmt Util*, 4-29
- DB Integrator, (G) *SW Overview*, 7-18
- DB Integrator Gateway, (G) *SW Overview*, 7-6
- DBMS, (G) *SW Overview*, 2-13, 7-6, 7-17
- DBQ prototyping tool, (S) *Dependable*, 8-33
- DCE (Distributed Computing Environment), (G) *SW Overview*, 2-6; (P) *Environment*, 3-5
 - heterogeneous networks, (G) *SW Overview*, 6-2
 - product family, (G) *SW Overview*, 2-9
 - software, (G) *SW Overview*, 6-13
 - standards, (G) *SW Overview*, 2-2
 - support for network transports, (G) *SW Overview*, 6-14
- DCE Application Development Kit for OpenVMS, (G) *SW Overview*, 2-10, 6-13; (P) *Environment*, 3-6
- DCE CDS
 - See CDS
- DCE DTS
 - See DTS
- DCE Remote Procedure Call
 - See RPC
- DCE Runtime Services for OpenVMS, (P) *Environment*, 3-6
- DCE Run-Time Services for OpenVMS, (G) *SW Overview*, 2-10, 6-13
- DCE Security Server, (G) *SW Overview*, 2-10, 6-13; (P) *Environment*, 3-6
- DCE Threads Service, (G) *SW Overview*, 2-10, 6-14
- DCL (DIGITAL Command Language), (G) *SW Overview*, 3-4, 5-2; (G) *Compatibility*, 1-2, A-1; (S) *TCP/IP*, 3-1, 5-1
 - alternate login command procedure, (G) *DCL A-M, DCLII-410*
 - definition, (G) *User*, 3-1
 - help, (G) *Compatibility*, 1-2
 - interpreter, global symbols, (P) *VAX SDA, SDA-64*
 - login command procedure, (G) *DCL A-M, DCLII-410*

DCL (DIGITAL Command Language) (cont'd)

- remote file handling commands, (S) *DECnet Intro*, 2-1
 - SHOW command, (G) *SW Overview*, 3-10
 - with Alpha CPU-specific page values, (S) *Comparison*, 5-7
 - with Alpha pagelet values, (S) *Comparison*, 5-7
- ## DCL commands, (S) *DECnet Mgmt*, 1-18
- abbreviating, (G) *User*, 3-7
 - in command procedures, (G) *User*, 3-7
 - abbreviating qualifiers, (G) *User*, 3-9
 - accessing disk and tape files, (S) *Sys Mgr Essentials*, 9-13
 - automatic foreign commands, (G) *V6.2 New Feat*, 2-2; (G) *User*, 14-39
 - canceling, (G) *User*, 3-18
 - case sensitivity, (G) *User*, 3-2
 - command qualifiers, (G) *User*, 3-9
 - conflicting qualifiers, (G) *User*, 3-10
 - constructing, (G) *User*, 3-3
 - continuing execution of, (G) *DCL A-M, DCLI-63*
 - default qualifiers, (G) *User*, 3-9
 - defaults, (G) *User*, 3-5
 - editing command line, (G) *User*, 3-16
 - entering, (G) *User*, 3-2
 - executing with SYSMAN DO command, (S) *Sys Mgr Essentials*, 2-18
 - file manipulation, (S) *Sys Mgr Essentials*, 9-1
 - for remote directory listings, (S) *Sys Mgr Tuning*, 21-14
 - for remote file access, (S) *Sys Mgr Tuning*, 21-14
 - for remote terminal service, (S) *Sys Mgr Tuning*, 21-13
 - for system management, (S) *Sys Mgr Essentials*, 2-5
 - including in command procedures, (G) *User*, 15-3
 - in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-30
 - interrupting, (G) *User*, 3-18
 - lowercase letters, (G) *User*, 3-6
 - marking beginning of input stream, (G) *DCL A-M, DCLI-112*
 - marking end of input stream, (G) *DCL A-M, DCLI-206*
 - maximum number of elements, (G) *User*, 3-7
 - MONITOR DECNET in network operations, (S) *DECnet Intro*, 4-7
 - multiple line command, (G) *User*, 3-6
 - order of in command procedures, (G) *User*, 15-9
 - parameter qualifiers, (G) *User*, 3-9
 - parameters, (G) *User*, 3-5
 - performed in the command interpreter, (G) *User*, 16-11
 - positional qualifiers, (G) *User*, 3-9

DCL commands (cont'd)

- prompt, (G) *User*, 3-3
 - recalling, (G) *User*, 3-19
 - redirecting output from, (G) *User*, 16-10
 - required punctuation, (G) *User*, 3-7
 - required spaces, (G) *User*, 3-6
 - resuming execution of, (G) *DCL A-M, DCLI-63*
 - retrieving file information, (S) *Sys Mgr Essentials*, 9-2
 - rules for entering, (G) *User*, 3-6
 - SET HOST and network security, (S) *DECnet Intro*, 3-34
 - SET HOST/DTE in network operations, (S) *Security*, 12-17
 - SET HOST in network operations, (S) *DECnet Intro*, 3-3
 - SET PROTECTION for network file security, (S) *DECnet Intro*, 3-35
 - SET TERMINAL in network operations, (S) *Security*, 12-15
 - SHOW NETWORK in network operations, (S) *DECnet Intro*, 3-4
 - specifying parameters, (G) *User*, 3-8
 - support for TCP/IP, (S) *Sys Mgr Tuning*, 21-13
 - syntax, (G) *User*, 3-3, 3-4
 - TYPE in network operations, (S) *DECnet Intro*, 2-14
 - uppercase letters, (G) *User*, 3-6
 - verbs, (G) *User*, 3-3
 - with DO command in SYSMAN, (S) *Sys Mgr Tuning*, 20-20
- ## DCL command strings
- See Command strings
- ## DCLDEF.STB file, (P) *Alpha SDA*, SDA-15; (P) *VAX SDA*, SDA-64
- ## DCL Help
- See HELP command
- ## DCL interface, (S) *Sys Mgr Essentials*, 3-18
- ## DCL interpreter
- global symbols, (P) *Alpha SDA*, SDA-15
- ## DCM
- use at CSC lights out data center, (S) *Dependable*, 11-17
- ## DCOLLATED key type, (P) *Rec Mgmt Util*, 4-29
- ## DCX\$ANALYZE_DATA routine, (P) *Util Routines*, DCX-12
- ## DCX\$ANALYZE_DONE routine, (P) *Util Routines*, DCX-14
- ## DCX\$ANALYZE_INIT routine, (P) *Util Routines*, DCX-15
- ## DCX\$COMPRESS_DATA routine, (P) *Util Routines*, DCX-18
- ## DCX\$COMPRESS_DONE routine, (P) *Util Routines*, DCX-20

- DCX\$COMPRESS_INIT routine, (P) *Util Routines*, DCX-21
- DCX\$EXPAND_DATA routine, (P) *Util Routines*, DCX-23
- DCX\$EXPAND_DONE routine, (P) *Util Routines*, DCX-25
- DCX\$EXPAND_INIT routine, (P) *Util Routines*, DCX-26
- DCX\$MAKE_MAP routine, (P) *Util Routines*, DCX-28
- DCX routines, (P) *Util Routines*, DCX-1
- examples, (P) *Util Routines*, DCX-11 to DCX-29
- DDBs (device data blocks), (P) *Alpha SDA*, SDA-94; (P) *VAX SDA*, SDA-105
- DDB symbol, (P) *VAX SDA*, SDA-17
- DDCMP (Digital Data Communications Message Protocol)
- asynchronous, (S) *DECnet Mgmt*, 1-3, 1-7, 2-12, 3-25, 5-12
- asynchronous communication, (S) *DECnet Intro*, 3-4, 3-19
- asynchronous connection, (S) *DECnet Intro*, 1-12
- asynchronous driver, (S) *Security*, 12-15; (S) *DECnet Intro*, 3-19, 3-25
- asynchronous line, (S) *DECnet Mgmt*, 1-4, 3-37
- circuit, (S) *DECnet Mgmt*, 2-6, 3-24, 3-26
- configuration, (S) *DECnet Mgmt*, 1-7
- CONTROL line, (S) *DECnet Mgmt*, 3-37
- DMC line, (S) *DECnet Mgmt*, 3-37
- dynamic asynchronous network configuration, (S) *DECnet Mgmt*, 5-29
- dynamic connection, (S) *DECnet Intro*, 3-19
- formula for determining maximum number of messages, (S) *DECnet Mgmt*, 3-44
- for multipoint connections, (S) *Sys Mgr Tuning*, 21-9
- for point-to-point connections, (S) *Sys Mgr Tuning*, 21-8
- lines, (S) *DECnet Mgmt*, 2-11, 3-38
- receive buffers, (S) *DECnet Mgmt*, 3-42
- MOP, (S) *DECnet Mgmt*, 4-11
- multipoint, (S) *DECnet Mgmt*, 1-8
- multipoint network configuration, (S) *DECnet Mgmt*, 5-25
- multipoint tributary addressing, (S) *DECnet Mgmt*, 3-25
- POINT line, (S) *DECnet Mgmt*, 3-37
- point-to-point, (S) *DECnet Mgmt*, 1-8
- point-to-point addressing, (S) *DECnet Mgmt*, 3-25
- protocol, (S) *DECnet Mgmt*, 1-8
- static asynchronous network configuration, (S) *DECnet Mgmt*, 5-27
- static connection, (S) *DECnet Intro*, 3-19
- DDCMP (Digital Data Communications Message Protocol) (cont'd)
- synchronous, (S) *DECnet Mgmt*, 1-3, 1-7, 2-7, 2-12
- synchronous connection, (S) *DECnet Intro*, 1-12
- synchronous devices, (S) *DECnet Mgmt*, 1-8
- synchronous line, (S) *DECnet Mgmt*, 1-4
- synchronous point-to-point network configuration, (S) *DECnet Mgmt*, 5-23
- TRIBUTARY line, (S) *DECnet Mgmt*, 3-37
- ddcu format
- for device names, (S) *Sys Mgr Essentials*, 7-1
- DDE (Dynamic Data Exchange) protocol
- ObjectBroker, (P) *Environment*, 3-6
- DDECIMAL key type, (P) *Rec Mgmt Util*, 4-29
- DDIF\$RMS_EXTENSION.EXE file, (P) *Alpha SDA*, SDA-61
- DDIF converters, (G) *DCL A-M*, DCLI-66, DCLI-67
- .DDIF files
- in Mail, (G) *User*, 6-9
- DDT (driver dispatch table), (P) *Alpha SDA*, SDA-94; (P) *VAX SDA*, SDA-105
- DDT symbol, (P) *VAX SDA*, SDA-17
- Deaccess file function, (P) *I/O User*, 1-27
- DEACTIVATE BREAK command, (P) *Debugger*, 7-11
- DEACTIVATE TRACE command, (P) *Debugger*, 7-11
- DEACTIVATE WATCH command, (P) *Debugger*, 7-13
- Deadlocks, (P) *Modular Proc*, 3-17
- debugging, (P) *Debugger*, 16-31
- detecting, (P) *Concepts*, 15-8
- how to avoid, (P) *DECthreads*, 3-8
- Dead timer, (S) *DECnet Mgmt*, 3-43
- DEALLOCATE command, (G) *User*, 12-3; (G) *DCL A-M*, DCLI-105; (S) *Sys Mgr Essentials*, 8-10
- tape, (S) *Sys Mgr Essentials*, 9-23
- Deallocating devices, (G) *DCL A-M*, DCLI-105; (S) *Sys Mgr Essentials*, 8-10; (P) *Sys Svc I*, SYS1-170
- Deallocating drives, (S) *Sys Mgr Essentials*, 8-10
- DEASSIGN command, (G) *User*, 13-22; (G) *DCL A-M*, DCLI-106 to DCLI-109
- Deassigning an I/O channel, (P) *Sys Svc I*, SYS1-172
- DEASSIGN/QUEUE command, (G) *DCL A-M*, DCLI-110
- DEBNA Ethernet device, (S) *DECnet Mgmt*, 2-10
- DEBNI Ethernet device, (S) *DECnet Mgmt*, 2-10
- DEBUG command, (G) *DCL A-M*, DCLI-111; (P) *Debugger*, 2-7, 5-13, 14-13
- Debugger
- See also Delta/XDelta Debugger utility

Debugger (cont'd)

- analyzing in object files, (G) *DCL A-M*, DCLI-26
- command interface, (P) *Debugger*, 5-1
 - with DECwindows Motif, (P) *Debugger*, 1-2, 1-13, 2-8, 2-9, 5-14
- customizing, (P) *Debugger*, 3-27, 11-13, 11-14, 11-19, 12-1, 12-4, 12-6, 12-8, 12-9
- DECwindows Motif interface, (P) *Debugger*, 1-1
- Delta/XDelta, (G) *Compatibility*, 1-11, 4-10
- differences, (G) *Compatibility*, 1-11
- displaying command interface on other terminal, (P) *Debugger*, 2-9, 13-5
- displaying DECwindows Motif interface on other workstation, (P) *Debugger*, 2-8
- exiting, (P) *Debugger*, 2-6
- information record analysis, (G) *DCL A-M*, DCLI-26
- initialization file, (P) *Debugger*, 12-4
- interrupting
 - with Ctrl/C, (P) *Debugger*, 5-11
 - with Ctrl/Y, (P) *Debugger*, 2-7, 5-13, 14-13
 - with Stop button, (P) *Debugger*, 2-6
- invoking, (G) *DCL A-M*, DCLI-29, DCLI-111
- Kept Debugger, (G) *DCL A-M*, DCLI-111
- messages, (P) *Debugger*, 1-16, 6-2
- monitoring
 - with SHOW CALLS command, (P) *Debugger*, 6-7
 - with tracepoint, (P) *Debugger*, 7-5
- multiprocess program, (P) *Debugger*, 14-6
- online help, (P) *Debugger*, 1-15, 6-1
- OpenVMS, (G) *Compatibility*, 1-11, 4-10
- OpenVMS Alpha System-Code, (G) *Compatibility*, 1-11, 4-11
- resource file, (P) *Debugger*, 3-31
- RUN command, (G) *DCL N-Z*, DCLII-53
- screen mode display, (P) *Debugger*, 11-2 to 11-24
 - DO display, (P) *Debugger*, 15-22
 - process specific, (P) *Debugger*, 14-15
 - register display (REG), (P) *Debugger*, 15-22
- starting, (P) *Debugger*, 2-1, 2-6, 5-7, 5-12, 14-1, 14-13
- starting or resuming
 - after exception break, (P) *Debugger*, 13-12
 - with CALL command, (P) *Debugger*, 12-11, 15-22
 - with Go button, (P) *Debugger*, 3-6
 - with GO command, (P) *Debugger*, 6-6
 - with Step button, (P) *Debugger*, 3-6
 - with STEP command, (P) *Debugger*, 7-2
 - with Step-In button, (P) *Debugger*, 3-7
 - with Step-Return button, (P) *Debugger*, 3-7

Debugger (cont'd)

- suspending
 - with breakpoint, (P) *Debugger*, 3-8, 7-4
 - with exception breakpoint, (P) *Debugger*, 3-9, 13-11
 - with watchpoint, (P) *Debugger*, 3-19, 7-11, 14-16
- terminating, (P) *Debugger*, 2-6, 5-10
- tutorial, command interface, (P) *Debugger*, 6-1
- use with completion status codes, (P) *RMS Ref*, 2-8
- using with DEPOSIT command, (G) *DCL A-M*, DCLI-147
- using with EXAMINE command, (G) *DCL A-M*, DCLI-209
- vectorized program, (P) *Debugger*, 15-2

Debugger commands

- disabled in DECwindows Motif, (P) *Debugger*, 1-14
- format, (P) *Debugger*, 6-1
- online help, (P) *Debugger*, 1-16, 6-1
- repeating, (P) *Debugger*, 12-9
- summary, (P) *Debugger*, 5-15
- with DECwindows Motif, (P) *Debugger*, 1-2, 1-13, 5-14

Debugger information records

- Alpha object language, (P) *Linker*, B-45
- VAX object language, (P) *Linker*, A-33

Debuggers, (P) *Environment*, 9-1 to 9-9

Debugging

- Alpha object language records, (P) *Linker*, B-45
- command procedures, (G) *User*, 15-14
 - SET PREFIX command, (G) *User*, 15-15
 - SET VERIFY command, (G) *User*, 15-15
 - SHOW SYMBOL command, (G) *User*, 15-15
- condition handler, (P) *Concepts*, 13-70
- enabling at link time, (P) *Linker*, LINK-9
- exit handler, (P) *Concepts*, 13-70
- including debugger information in an image, (P) *Linker*, 3-24
- including global symbols in a symbol table file, (P) *Linker*, LINK-64
- including traceback information, (P) *Linker*, LINK-39
- multithreaded programs, (P) *DECthreads*, cma-39, cma-40
- object language record format, (P) *Linker*, B-45
- programs that use VM zones, (P) *Concepts*, 21-19
- satellite booting, (S) *VMScluster Sys*, C-5
- specifying a user-written debugger, (P) *Linker*, LINK-9
- threads on OpenVMS systems, (P) *DECthreads*, B-2
- threads on systems based on UNIX software, (P) *DECthreads*, A-9

- Debugging (cont'd)
 - VAX object language records, (P) *Linker*, A-33
- Debugging configurations
 - default, (P) *Debugger*, 5-14, 14-10
 - multiprocess, (P) *Debugger*, 14-1, 14-10
- /DEBUG qualifier, (P) *Linker*, LINK-9; (P) *Debugger*, 5-5, 9-2, 9-4, 10-1
- shareable image, (P) *Debugger*, 9-11
- Debug symbol files
 - See also /DSF qualifier
 - creating, (P) *Linker*, 1-15, LINK-12
- Debug symbol tables
 - See DSTs
- DEC 7000 Model 600 Alpha system
 - DSA local device naming, (S) *Comparison*, 2-23
- DEC ACCESSWORKS, (G) *SW Overview*, 7-18
 - See ACCESSWORKS
- DEC Ada
 - See Ada
- DECADMIRE, (G) *SW Overview*, 6-16, 7-5; (P) *Environment*, 1-5
 - applications development tool, (S) *Dependable*, 3-9
- DECalert, (S) *Dependable*, 11-12, 11-14 to 11-15
 - introduction, (S) *Dependable*, 7-17
- DECamds, (G) *V6.2 New Feat*, 3-23; (G) *SW Overview*, 2-13, 7-3, 7-7; (S) *Dependable*, 8-17 to 8-18
 - operations management, (S) *VMScluster Sys*, 1-9
 - overview, (S) *DECamds*, 1-1
 - processing model, (S) *DECamds*, 1-2
 - security features, (S) *DECamds*, 1-3
 - starting, (S) *DECamds*, 2-1, A-14
- DECamds software
 - not in C2 evaluation, (S) *Security*, C-3
- DEC BASIC
 - See BASIC
- %DEC built-in symbol, (P) *Debugger*, 8-12, B-6
- DEC C
 - See C
- DEC C++
 - See C++
- DEC C compiler
 - alignment, (P) *Concepts*, 22-4
- DEC COBOL
 - See COBOL
- DEC Code Management System
 - See CMS
- DEC Data Distributor
 - See Data Distributor
- DEC DB Integrator
 - See DB Integrator
- DEC DB Integrator Gateway
 - See DB Integrator Gateway
- DEC DBMS
 - See also DBMS
 - DBQ utility as prototyping tool, (S) *Dependable*, 8-33
- DECdecision, (G) *SW Overview*, 7-5, 7-17
 - 4GL technology, (S) *Dependable*, 3-9
- DECdfs, (G) *SW Overview*, 2-11; (P) *Environment*, 3-2
- DECdns, (G) *SW Overview*, 2-10, 6-3; (P) *Environment*, 3-2
 - call time out, (P) *Concepts*, 11-4
 - clerk, (S) *DECnet Mgmt*, 3-23
 - creating objects, (P) *Concepts*, 11-4
 - DECnet use of, (S) *DECnet Mgmt*, 3-22
 - development product, (S) *Dependable*, 8-60
 - event messages, (S) *DECnet Mgmt Util*, D-12
 - events, (S) *DECnet Mgmt Util*, D-12
 - IDP, (S) *DECnet Mgmt Util*, 3-7
 - interface, (S) *DECnet Mgmt Util*, 3-7, 3-66
 - namespace, (S) *DECnet Mgmt Util*, 3-7, 3-66
 - naming conventions, (P) *Concepts*, 11-16
 - object attributes, (P) *Concepts*, 11-10
 - startup, (S) *DECnet Mgmt*, 3-23
 - storing full names in, (S) *Sys Mgr Tuning*, 21-2
 - supporting network dependability, (S) *Dependable*, 7-16
- DECdns distributed name service
 - not in C2 evaluation, (S) *Security*, C-3
- DECdns names
 - converting, (P) *Sys Svc I*, SYS1-228, SYS1-229, SYS1-230, SYS1-232
 - converting full name, (P) *Sys Svc I*, SYS1-228
 - interface option not supported on Alpha systems, (S) *Comparison*, 6-7
 - not supported by DECnet, (S) *Comparison*, 6-6
- DECdns objects
 - creating, (P) *Sys Svc I*, SYS1-223
 - deleting, (P) *Sys Svc I*, SYS1-224
 - enumerating, (P) *Sys Svc I*, SYS1-226
- DECdtm
 - system services, (P) *Environment*, 10-5
- DECDTMDEF.STB file, (P) *Alpha SDA*, SDA-15
- DECdtm services
 - aborted, (P) *Concepts*, 12-1
 - and managing transaction logs, (S) *Sys Mgr Tuning*, 25-1
 - atomic, (P) *Concepts*, 12-1
 - committed, (P) *Concepts*, 12-1
 - creating a transaction log, (S) *VMScluster Sys*, 8-25
 - data integrity, (G) *SW Overview*, 7-4
 - determining computer use of, (S) *VMScluster Sys*, 8-3
 - disabling, (S) *Sys Mgr Tuning*, 25-20
 - distributed transaction, (P) *Concepts*, 12-1

DECdtm services (cont'd)

- enabling, (S) *Sys Mgr Tuning*, 25–21
- introduction to programming, (P) *Concepts*, 12–1
- log manager, (G) *SW Overview*, 7–13
- software components, (G) *SW Overview*, 3–6
- supported on Alpha systems, (S) *Comparison*, 2–5
- support for transaction processing, (G) *SW Overview*, 2–13, 4–12, 7–13
- transaction manager (TM), (G) *SW Overview*, 7–13

DECdtm transaction manager, (S) *Sys Mgmt Util M-Z*, A–41

DECdts, (G) *SW Overview*, 2–10, 6–4; (P) *Environment*, 3–2

DECelms software

- introduction, (S) *Dependable*, 7–18
- monitoring LAN traffic, (S) *VMScluster Sys*, 10–26

DECevent Event Management utility, (G) *SW Overview*, 7–5

DECevent utility, (G) *Compatibility*, 1–8, A–1; (S) *Sys Mgmt Util A-L*, 9–4; (S) *Comparison*, 3–4

- additional commands, (S) *Sys Mgr Tuning*, 18–11
- brief report example, (S) *Sys Mgmt Util A-L*, 9–22
- description, (S) *Sys Mgr Tuning*, 18–2
- device classes

- excluding, (S) *Sys Mgmt Util A-L*, 9–9
- including, (S) *Sys Mgmt Util A-L*, 9–13

device name, (S) *Sys Mgmt Util A-L*, 9–10

DIAGNOSE command, (S) *Sys Mgr Tuning*, 18–2

entry type, (S) *Sys Mgmt Util A-L*, 9–10, 9–13

error log file, (S) *Sys Mgmt Util A-L*, 9–17

exiting, (S) *Sys Mgr Tuning*, 18–9

fast error report example, (S) *Sys Mgmt Util A-L*, 9–24

full report example, (S) *Sys Mgmt Util A-L*, 9–21

informational messages, (S) *Sys Mgmt Util A-L*, 9–16

introduction, (S) *Sys Mgr Tuning*, 18–8

invoking, (S) *Sys Mgr Tuning*, 18–9

output

- directing, (S) *Sys Mgmt Util A-L*, 9–16, 9–17
- file specification, (S) *Sys Mgmt Util A-L*, 9–17

privileges required, (S) *Sys Mgr Tuning*, 18–11

producing reports, (S) *Sys Mgr Tuning*, 18–11

qualifiers, (S) *Sys Mgr Tuning*, 18–10; (S) *Sys Mgmt Util A-L*, 9–5 to 9–20

report examples, (S) *Sys Mgmt Util A-L*, 9–21 to 9–25

DECevent utility (cont'd)

report format

binary, (S) *Sys Mgmt Util A-L*, 9–6, 9–13, 9–17

brief, (S) *Sys Mgmt Util A-L*, 9–7

fast error, (S) *Sys Mgmt Util A-L*, 9–12

full, (S) *Sys Mgmt Util A-L*, 9–12

rejected entries, (S) *Sys Mgmt Util A-L*, 9–17

summary, (S) *Sys Mgmt Util A-L*, 9–19

terse, (S) *Sys Mgmt Util A-L*, 9–19

report formats, (S) *Sys Mgr Tuning*, 18–9

brief, (S) *Sys Mgr Tuning*, 18–12

fast error (FSTERR), (S) *Sys Mgr Tuning*, 18–15

full, (S) *Sys Mgr Tuning*, 18–11

summary, (S) *Sys Mgr Tuning*, 18–14

terse, (S) *Sys Mgr Tuning*, 18–13

summary report example, (S) *Sys Mgmt Util A-L*, 9–24

terse report example, (S) *Sys Mgmt Util A-L*, 9–23

using to report on error log file, (S) *Sys Mgr Tuning*, 18–8

DEC File Optimizer for OpenVMS, (S)

Dependable, 8–27; (S) *VMScluster Sys*, 1–11

See File Optimizer

defragmenting disks, (S) *Comparison*, 3–3; (S) *Dependable*, 9–5, 9–17

restoring contiguity on fragmented disks, (S) *VAX Perform*, 3–36; (S) *Alpha Perform*, 11–8

DECforms, (G) *SW Overview*, 2–13, 7–6; (G)

Compatibility, 1–2; (P) *Concepts*, 7–2

forms interface, (S) *Dependable*, 8–51

prototyping tool, (S) *Dependable*, 8–32

user interfaces, (G) *SW Overview*, 5–8

using in transaction processing applications, (G) *SW Overview*, 7–13

DECforms/Rdb applications, (P) *Environment*, 1–5

DEC Fortran

See Fortran

DEC Fortran compiler

alignment, (P) *Concepts*, 22–6

DEC GKS

See GKS

Decimal dump, (G) *DCL A-M*, DCLI–183

DECIMAL key type, (P) *Rec Mgmt Util*, 4–30

Decimal overflow detection, (P) *LIB\$, LIB*–109

/DECIMAL qualifier, (P) *Debugger*, 8–11

Decimal string descriptors, (P) *Calling Std*, 5–8

Decimal value of an expression, (P) *Alpha SDA*, SDA–45; (P) *VAX SDA*, SDA–53

DEC InfoServer

See InfoServer

- DECK command, (G) *DCL A-M*, DCLI-112 to DCLI-114
- DEC language implementation tables
See Implementation tables
- DEC Language-Sensitive Editor
See LSE
- DEC Language-Sensitive Editor/Source Code Analyzer
See LSE/SCA
- DECLARE command, (P) *Debugger*, 12-2
- Declaring an AST (asynchronous system trap), (P) *Sys Svc I*, SYS1-174
- DEClinks, (G) *SW Overview*, 4-17, 5-7; (P) *Environment*, 2-4
- DEC MAILworks
See MailWorks
- DEC Management Control Center
See DECMcc
- DECMcc, (S) *VMScluster Sys*, 1-10
monitoring LAN traffic, (S) *VMScluster Sys*, 10-26
monitoring networks, (S) *Dependable*, 7-19
use at CSC lights out data center, (S) *Dependable*, 11-18
- DECMigrate for OpenVMS AXP, (G) *SW Overview*, 1-13, 4-6; (G) *Compatibility*, 1-4, 1-10, 1-12; (P) *Environment*, 1-5
documentation, (G) *Compatibility*, 3-9
vector instructions, (G) *Compatibility*, 1-12
- DEC Module Management System
See MMS
- DEC Multinational character set, (G) *User*, B-1, B-3; (P) *I/O User*, B-1
string comparison, (P) *STR\$*, STR-11, STR-18
string conversion, (P) *STR\$*, STR-85
using, (P) *RMS Ref*, 2-9
- DECnet, (G) *Compatibility*, 2-1
See also DECnet for OpenVMS, DECnet/OSI for OpenVMS, Networks
adaptive routing, (S) *Sys Mgr Tuning*, 21-5; (S) *DECnet Intro*, 1-3
advantages, (S) *Sys Mgr Tuning*, 21-1
asynchronous
using virtual terminals, (S) *Sys Mgr Essentials*, 7-11, 7-12
automatic configuration, (S) *DECnet Intro*, 3-11
C2 system restrictions, (S) *Security*, C-10
circuit
definition, (S) *Sys Mgr Tuning*, 21-4
circuit and line devices, (S) *DECnet Mgmt Util*, A-1
cluster aliases
using to promote network application availability, (S) *Dependable*, 7-15
cluster alias supported, (S) *Comparison*, 6-1
- DECnet (cont'd)
cluster nodes and, (S) *Security*, 11-8
communications line
definition, (S) *Sys Mgr Tuning*, 21-4
compatibility, (G) *SW Overview*, 2-10, 2-16, 6-3
configuration, (S) *DECnet Intro*, 1-5, 1-7; (S) *DECnet Mgmt*, 1-2
automatic, (S) *Sys Mgr Tuning*, 21-12
manual, (S) *Sys Mgr Tuning*, 21-12
on an OpenVMS system, (S) *Sys Mgr Tuning*, 21-7
with bridge, (S) *Sys Mgr Tuning*, 21-7
configuration database, (S) *Sys Mgr Tuning*, 21-10; (S) *DECnet Intro*, 2-16, 3-10, 3-32; (S) *DECnet Mgmt*, 1-12
configuration on an OpenVMS system, (S) *DECnet Intro*, 1-5
configuration prerequisites, (S) *DECnet Mgmt*, 5-1
connecting with communications line, (S) *Sys Mgr Tuning*, 21-12
connection, (S) *DECnet Intro*, 1-5
console connection, (S) *DECnet Intro*, 2-16
debugging over, (P) *Debugger*, 2-4, 5-9
DECNET object, (S) *Comparison*, 6-2
defining node names, (S) *DECnet Intro*, 3-18
definition, (S) *Sys Mgr Tuning*, 21-4
detecting common problems, (S) *DECnet Intro*, 4-10 to 4-17
device names, (S) *DECnet Intro*, 3-33
devices supported by, (S) *DECnet Mgmt Util*, A-1
downline loading, (S) *DECnet Intro*, 2-16
dynamic asynchronous connection, (S) *Security*, 12-17; (S) *DECnet Intro*, 3-19, 3-25, 3-27, 3-29, 4-16
end node, (S) *Sys Mgr Tuning*, 21-6
end node PAK, (S) *DECnet Intro*, 3-10
error message during UETP, (S) *Sys Mgr Tuning*, 17-28
error messages, (S) *DECnet Intro*, 3-31
error messages and meanings, (S) *DECnet Intro*, 4-10
establishing node in network, (S) *Sys Mgr Tuning*, 21-11
Ethernet, (S) *Sys Mgr Tuning*, 21-5
event class, (S) *DECnet Intro*, 4-5
event class and type summary, (S) *DECnet Mgmt Util*, D-1 to D-13
event logger, (S) *DECnet Intro*, 3-32, 4-4
Event Logging facility
to monitor network events, (S) *Sys Mgr Tuning*, 21-17
event type, (S) *DECnet Intro*, 4-5
full function PAK, (S) *DECnet Intro*, 3-10
functions, (S) *DECnet Mgmt*, 1-2
general user, (S) *DECnet Intro*, 2-1 to 2-11

DECnet (cont'd)

- growth, (S) *DECnet Intro*, 1-5
- hardware, (S) *DECnet Intro*, 1-5
- host services, (S) *DECnet Intro*, 2-16; (S) *DECnet Mgmt*, 1-2, 1-12
- INBOUND parameter, (S) *DECnet Intro*, 3-26
- installation procedure, (S) *DECnet Intro*, 3-1, 3-9
- installation verification, (S) *DECnet Intro*, 3-31
- installing dynamic asynchronous connection, (S) *Security*, 12-15; (S) *DECnet Intro*, 3-24
- installing static asynchronous connection, (S) *DECnet Intro*, 3-19
- key, (S) *DECnet Intro*, 3-8
- LAT software
 - effect of SCSSYSTEMID system parameter, (S) *Sys Mgmt Util A-L*, 13-7
- license, (S) *Sys Mgr Tuning*, 21-12; (S) *DECnet Intro*, 1-5, 3-8, 3-9; (S) *DECnet Mgmt*, 2-17
- local area network (LAN) connections, (S) *Sys Mgr Tuning*, 21-8
- logging in to a node, (S) *DECnet Intro*, 3-1
- logical link
 - definition, (S) *Sys Mgr Tuning*, 21-4
- losing connection to remote system, (G) *User*, 2-25
- managing a network node, (S) *Sys Mgr Tuning*, 21-14
 - providing host services, (S) *Sys Mgr Tuning*, 21-15
- managing remote nodes with, (S) *Sys Mgr Essentials*, 2-12
- manipulating files with, (G) *User*, 4-12
- manual configuration, (S) *DECnet Intro*, 3-11
- migration issues, (S) *Comparison*, 6-1
- multiple-area network, (S) *Sys Mgr Tuning*, 21-6
- network configurations, (S) *Sys Mgr Tuning*, 21-6
- network connections, (S) *Sys Mgr Tuning*, 21-8
- networking interface, (S) *DECnet Intro*, 1-1
- networking products, (G) *SW Overview*, 1-9
- network interface for OpenVMS, (S) *Sys Mgr Tuning*, 21-7
- network monitoring, (S) *Sys Mgr Tuning*, 21-14
 - tools, (S) *Sys Mgr Tuning*, 21-15
- networks, (G) *SW Overview*, 6-2
- network transport, (G) *SW Overview*, 6-24
- node, (S) *DECnet Intro*, 1-3, 1-5, 1-6, 3-1; (S) *DECnet Mgmt*, 2-1
- node address, (S) *DECnet Intro*, 3-12
- node configuration, (S) *DECnet Intro*, 2-16
- node configuration planning, (S) *DECnet Intro*, 3-8
- node name, (S) *DECnet Intro*, 3-12
- nonprivileged user name, (S) *Security*, 12-10

DECnet (cont'd)

- object, (S) *DECnet Intro*, 1-2, 3-32
- object definition, (S) *Sys Mgr Tuning*, 21-4
- OpenVMS networking interface, (S) *DECnet Intro*, 1-5
- overriding AUTOGEN observations, (S) *Sys Mgr Tuning*, 14-21
- over terminal lines, (S) *DECnet Mgmt*, 5-11
- over the CI, (S) *DECnet Mgmt*, 5-11
- overview, (S) *DECnet Intro*, 1-1
- P.S.I. not supported on Alpha systems, (S) *Comparison*, 6-4
- PAK, (S) *Sys Mgr Tuning*, 21-12; (S) *DECnet Intro*, 3-9
- PAK name difference using DECnet for OpenVMS Alpha systems, (S) *Comparison*, 2-14
- Phase IV and Phase V compared, (S) *Sys Mgr Tuning*, 21-1
- planning configuration, (S) *Sys Mgr Tuning*, 21-12
- preparing for UETP, (S) *Sys Mgr Tuning*, 17-12
- preparing system, (S) *Sys Mgr Tuning*, 21-12
- programmer, (S) *DECnet Intro*, 2-12
- protocol, (S) *DECnet Intro*, 1-3
- receive password, (S) *Security*, 12-16; (S) *DECnet Intro*, 3-21, 3-25, 3-26, 3-34
- registering the key, (S) *DECnet Intro*, 1-5, 3-14
- restarting, (S) *DECnet Intro*, 3-32, 3-34
- router node, (S) *Sys Mgr Tuning*, 21-5
- routing
 - definition, (S) *Sys Mgr Tuning*, 21-5
 - levels of, (S) *Sys Mgr Tuning*, 21-5
- security, (G) *SW Overview*, 6-7; (S) *Sys Mgr Tuning*, 21-12
 - controlling access to node, (S) *Sys Mgr Tuning*, 21-12
 - protecting files, (S) *Sys Mgr Tuning*, 21-12
 - using proxy accounts, (S) *Sys Mgr Tuning*, 21-12
- security for node, (S) *DECnet Intro*, 3-34 to 3-38
- shutting down, (S) *DECnet Intro*, 3-32
- shutting down for software installation, (S) *Sys Mgr Essentials*, 3-7
- software, (G) *SW Overview*, 6-3; (S) *DECnet Intro*, 1-5; (S) *DECnet Mgmt*, 1-12
- software in network operations, (S) *DECnet Intro*, 1-6
- specifying full node names, (G) *User*, 4-6
- specifying MAIL addresses, (S) *Sys Mgr Essentials*, 5-33
- specifying maximum record size for remote file access, (P) *RMS Ref*, 4-23
- starting, (S) *DECnet Intro*, 3-14
- startup, (S) *DECnet Mgmt*, 3-23

DECnet (cont'd)

- static asynchronous connection, (S) *DECnet Intro*, 3-19, 3-23
 - structure, (S) *DECnet Intro*, 1-3
 - system and network manager responsibilities, (S) *DECnet Intro*, 2-16 to 2-17
 - terminology, (S) *Sys Mgr Tuning*, 21-4
 - testing hardware and software with UETP, (S) *DECnet Intro*, 3-29
 - testing network, (S) *Sys Mgr Tuning*, 21-17
 - transmit password, (S) *Security*, 12-16; (S) *DECnet Intro*, 3-21, 3-25
 - turning on, (S) *DECnet Intro*, 3-14
 - UETP defaults for installation, (S) *Sys Mgr Tuning*, 17-30
 - UETP test phase, (S) *Sys Mgr Tuning*, 17-35, 17-36
 - upline dumping, (S) *DECnet Intro*, 2-16
 - user applications, (G) *SW Overview*, 6-6
 - using the Analyze/RMS_File utility with, (P) *Rec Mgmt Util*, 1-6
 - using the Convert/Reclaim utility with, (P) *Rec Mgmt Util*, 3-1
 - using the Convert utility with, (P) *Rec Mgmt Util*, 2-4
 - using the Network Control Program to control, (S) *DECnet Mgmt Util*, 1-1, 2-1
 - using with EXCHANGE/NETWORK, (S) *Sys Mgr Essentials*, 9-24
 - verifying connection, (S) *DECnet Intro*, 3-29, 3-31
 - verifying connection to the network, (S) *Sys Mgr Tuning*, 21-12
 - VMScluster satellite synonym, (S) *Dependable*, 7-9
 - WAN (wide area network) connections, (S) *Sys Mgr Tuning*, 21-8
 - with VMScluster systems, (S) *Sys Mgr Tuning*, 21-6
 - worldwide connections, (S) *Sys Mgr Tuning*, 21-9
- DECnet/OSI for OpenVMS, (G) *SW Overview*, 1-10; (G) *Compatibility*, 2-1; (S) *Sys Mgr Tuning*, 21-1; (S) *TCP/IP*, 1-4, 2-2; (P) *Environment*, 3-1, 3-2
- See also DECnet, Networks
- features, (G) *SW Overview*, 6-3; (G) *Compatibility*, 2-7
- full name routines
- LIB\$BUILD_NODESPEC routine, (P) *LIB\$*, LIB-23
 - LIB\$COMPARE_NODENAME routine, (P) *LIB\$*, LIB-30
 - LIB\$COMPRESS_NODENAME routine, (P) *LIB\$*, LIB-32
 - LIB\$EXPAND_NODENAME routine, (P) *LIB\$*, LIB-147

DECnet/OSI for OpenVMS

full name routines (cont'd)

- LIB\$FIT_NODENAME routine, (P) *LIB\$*, LIB-173
 - LIB\$GET_FULLNAME_OFFSET routine, (P) *LIB\$*, LIB-231
 - LIB\$GET_HOSTNAME routine, (P) *LIB\$*, LIB-233
 - LIB\$TRIM_FULLNAME routine, (P) *LIB\$*, LIB-503
- full names, (S) *Sys Mgr Tuning*, 21-2
- full name support
- routines, (G) *V6.2 New Feat*, 4-1
- NCL command language, (G) *SW Overview*, 6-5
- network management, (G) *SW Overview*, 2-16, 6-4, 6-5
- open networking, (G) *SW Overview*, 2-10
- OSI model, (G) *SW Overview*, 2-6
- setting up a node, (G) *SW Overview*, 3-12
- standards supported, (G) *SW Overview*, 6-3
- starting, (S) *Sys Mgr Essentials*, 5-16
- DECnet accounts
- default, (S) *DECnet Intro*, 2-3, 3-11, 4-10
 - default nonprivileged, (S) *DECnet Intro*, 3-13, 3-37; (S) *DECnet Mgmt*, 5-3, 5-6
 - DECnet, (S) *DECnet Mgmt*, 2-25, 2-26
 - example, (S) *DECnet Mgmt*, 5-7
 - FAL\$SERVER, (S) *DECnet Mgmt*, 2-25, 5-3, 5-6
 - MAIL\$SERVER, (S) *DECnet Mgmt*, 2-25, 5-3, 5-6
 - MIRRO\$SERVER, (S) *DECnet Mgmt*, 2-25, 5-3, 5-6
 - NML\$SERVER, (S) *DECnet Mgmt*, 2-25, 5-3, 5-6
 - PHONE\$SERVER, (S) *DECnet Mgmt*, 5-3, 5-6
 - using NETCONFIG_UPDATE.COM, (S) *DECnet Mgmt*, 5-10
 - VPM\$SERVER, (S) *DECnet Mgmt*, 2-26, 5-3, 5-6
- enabling default access, (S) *DECnet Mgmt*, 2-25, 2-26, 5-3, 5-6
- network objects, (S) *Security*, 12-11
- nonprivileged, (S) *DECnet Mgmt Util*, 4-8
- removing, (S) *Security*, 12-13
- DECNET class record
- in Monitor utility, (S) *Sys Mgmt Util M-Z*, A-13
- DECnet data structures
- global symbols, (P) *Alpha SDA*, SDA-15; (P) *VAX SDA*, SDA-64
- DECnet directories
- default, (S) *DECnet Intro*, 3-11
 - default nonprivileged, (S) *DECnet Intro*, 3-11

- DECnet-DOS software
 - in network operations, (S) *DECnet Intro*, 1-6
- DECnet event logging facility
 - displaying information with NCP, (S) *DECnet Intro*, 4-1
- DECnet for OpenVMS, (G) *DCL N-Z*, DCLII-150, DCLII-160; (G) *SW Overview*, 1-10, 2-10; (G) *Compatibility*, 2-1; (P) *Environment*, 3-2
- See also DECnet, Networks
 - activity statistics, (S) *DECnet Intro*, 4-7
 - cluster alias supported, (G) *Compatibility*, 2-6
 - DECnet object, (G) *Compatibility*, 2-6
 - network management, (G) *SW Overview*, 2-16
 - network management tasks, (G) *SW Overview*, 6-5
 - node names, (S) *Sys Mgr Tuning*, 21-2
 - Phase IV, (G) *SW Overview*, 6-3
 - Phase IV protocols, (G) *SW Overview*, 1-10
 - running DECwindows applications across, (G) *DCL N-Z*, DCLII-131
 - setting up a node, (G) *SW Overview*, 3-12
 - starting, (S) *Sys Mgr Essentials*, 5-15
- DECnet for OpenVMS licenses, (S) *DECnet Intro*, 1-5, 3-8, 3-9; (S) *DECnet Mgmt*, 1-12
- end node kit, (S) *DECnet Mgmt*, 1-12, 6-1
- full function kit, (S) *DECnet Mgmt*, 1-12, 6-1
- registering the key, (S) *DECnet Mgmt*, 1-12, 5-7, 6-1
- DECnet Monitor
 - introduction, (S) *Dependable*, 7-18
 - use at CSC lights out data center, (S) *Dependable*, 11-17
- DECnet over TCP/IP, (S) *TCP/IP*, B-1
- DECnet-RSX software, (S) *DECnet Intro*, 1-6
- DECnet/SNA gateways, (S) *DECnet Intro*, 1-6, 1-13
- DECnet software
 - cluster alias, (S) *VMScluster Sys*, 4-9, 4-10, 4-11
 - limits, (S) *VMScluster Sys*, 9-21
 - cluster satellite pseudoname, (S) *VMScluster Sys*, 9-8
 - configuring, (S) *VMScluster Sys*, 4-8
 - disabling LAN device, (S) *VMScluster Sys*, 4-8
 - downline loading, (S) *VMScluster Sys*, 9-9
 - enabling circuit service for cluster MOP server, (S) *VMScluster Sys*, 4-7
 - installing network license, (S) *VMScluster Sys*, 4-5
 - LAN network troubleshooting, (S) *VMScluster Sys*, D-3
 - LAN segments provide service, (S) *VMScluster Sys*, 3-17
 - making databases available clusterwide, (S) *VMScluster Sys*, 4-8
 - making remote node data available clusterwide, (S) *VMScluster Sys*, 4-8
 - maximum address value
- DECnet software
 - maximum address value (cont'd)
 - defining for cluster boot server, (S) *VMScluster Sys*, 4-7
 - modifying satellite LAN hardware address, (S) *VMScluster Sys*, 8-22
 - monitoring LAN activity, (S) *VMScluster Sys*, 10-26
 - NETNODE_REMOTE.DAT file
 - renaming to SYS\$COMMON directory, (S) *VMScluster Sys*, 4-8
 - network cluster functions, (S) *VMScluster Sys*, 1-6
 - Network Control Program utility (NCP), (S) *VMScluster Sys*, 4-9
 - restoring satellite configuration data, (S) *VMScluster Sys*, 10-5
 - starting, (S) *VMScluster Sys*, 4-10
 - tailoring, (S) *VMScluster Sys*, 4-7
- DECnet Test Sender/DECnet Test Receiver utility (DTS/DTR), (G) *Compatibility*, 2-6; (S) *DECnet Mgmt Util*, 4-1
- abort, (S) *DECnet Mgmt Util*, 4-7, 4-8, 4-9, 4-12
- as a network exerciser, (S) *DECnet Intro*, 4-6
- as a network monitoring tool, (S) *DECnet Intro*, 4-1
- commands, (S) *DECnet Mgmt Util*, 4-3 to 4-12
 - abbreviating, (S) *DECnet Mgmt Util*, 4-1
 - qualifiers, (S) *DECnet Mgmt Util*, 4-1
 - syntax, (S) *DECnet Mgmt Util*, 4-1
 - using in a batch job, (S) *DECnet Mgmt Util*, 4-1
- command syntax, (S) *DECnet Mgmt Util*, 4-1
- directing output, (S) *DECnet Mgmt Util*, 4-3
- invoking, (S) *DECnet Mgmt Util*, 4-2
- network monitoring tool, (S) *Sys Mgr Tuning*, 21-17
- printing, (S) *DECnet Mgmt Util*, 4-3
- testing network, (S) *DECnet Mgmt Util*, 4-4 to 4-12
- tests
 - connection, (S) *DECnet Mgmt Util*, 4-4
 - data, (S) *DECnet Mgmt Util*, 4-6
 - disconnection, (S) *DECnet Mgmt Util*, 4-8
 - exiting, (S) *DECnet Mgmt Util*, 4-3
 - interrupt, (S) *DECnet Mgmt Util*, 4-11
 - subtests, (S) *DECnet Mgmt Util*, 4-2
 - terminating, (S) *DECnet Mgmt Util*, 4-3
 - using, (S) *DECnet Mgmt Util*, 4-3
- DECnet-ULTRIX software, (S) *DECnet Intro*, 1-6
- DECnet-VAX
 - dynamic asynchronous connection, (S) *Security*, 12-19
- DECNIS network integration server, (G) *SW Overview*, 6-8

- DEC Notes
 - See Notes
- Decompressing libraries, (S) *Comparison*, 2-1
- DEC Open3D for OpenVMS Alpha
 - See Open3D
- DEC OPS5
 - See OPS5
- DEC OSF/1, (P) *DECthreads*, A-1
- DEC/OSI full names
 - not in C2 evaluation, (S) *Security*, C-3
- DEC Pascal
 - See Pascal
- DEC PCA
 - See PCA performance testing
- DEC PHIGS
 - See PHIGS
- DEC PL/I
 - See PL/I
- DECplan, (G) *SW Overview*, 6-16
- DECquery, (G) *SW Overview*, 7-17
 - for MS-DOS, (P) *Environment*, 1-4
- DEC RALLY
 - See RALLY
- DECram, (G) *SW Overview*, 2-15, 7-7
 - device drivers, (G) *SW Overview*, 7-8
- DEC Rdb
 - automatic cleanup of databases, (S) *Dependable*, 8-46
 - database security, (S) *Dependable*, 8-48
 - dependability features, (S) *Dependable*, 8-35 to 8-50
 - failover of databases in VMSclusters, (S) *Dependable*, 8-35
 - online backup, (S) *Dependable*, 8-40
 - online restructuring of database characteristics, (S) *Dependable*, 8-47
 - replication in wide area networks, (S) *Dependable*, 3-6
 - use of transaction sequence numbers in online backup, (S) *Dependable*, 8-41
 - using DECtrace with, (S) *Dependable*, 8-50
 - using RdbExpert with, (S) *Dependable*, 8-50
- DEC Rdb for OpenVMS
 - See Rdb
- DEC Reliable Transaction Router
 - See RTR
- DECrpc, (G) *SW Overview*, 2-11; (P) *Environment*, 3-2
- DEC RTR (Reliable Transaction Router), (G) *SW Overview*, 2-14, 7-11, 7-14
 - providing software fault tolerance, (S) *Dependable*, 8-2 to 8-10
- Decryption, (S) *Security*, 8-27
- DECSA (Digital Ethernet Communications Server)
 - connection to remote console, (S) *DECnet Mgmt*, 4-18
- DECscheduler
 - production scheduler, (S) *Dependable*, 9-9
- DECservers, (G) *SW Overview*, 6-8
 - changing device characteristics, (S) *Sys Mgmt Util A-L*, 13-10, 13-35
- DECset, (G) *SW Overview*, 4-18, 6-15; (P) *Environment*, 6-1, 9-1
 - See also CASE
 - product set, (S) *Dependable*, 3-8
 - software development tools, (S) *Dependable*, 8-58
 - testing software, (S) *Dependable*, 3-10
- DECsound, (G) *SW Overview*, 5-6
- DECstart
 - services from Digital, (S) *Dependable*, 10-4
- DECTalk
 - Refer to the *OpenVMS RTL DECTalk (DTK\$) Manual*
- DEC TCP/IP Services for OpenVMS
 - See TCP/IP
- DECTerm, (G) *SW Overview*, 5-6, 5-7
- DECTerm window
 - setting application keypad, (G) *DCL A-M*, DCLI-100
- DEC Test Manager
 - See Test Manager
- DEC Text Processing Utility
 - See DECTPU
- DEC Text Processing Utility (DECTPU), (G) *User*, 8-1; (G) *SW Overview*, 4-4; (P) *Environment*, 5-1; (P) *Concepts*, 7-1
- EVE, (G) *SW Overview*, 5-12
- EVE editor, (P) *Environment*, 5-2
- invoking, (G) *DCL A-M*, DCLI-201
- DECthreads, (G) *SW Overview*, 2-10, 4-9
 - See also Tasking (multithread) programs and *Guide to DECthreads*
- DECTp, (G) *SW Overview*, 7-11; (P) *Environment*, 1-4
- DECTp Desktop for ACMS, (G) *SW Overview*, 6-22, 7-5, 7-11
 - See Desktop ACMS
- DECTPU editor
 - See EVE
- DECTPU routines, (P) *Util Routines*, DECTPU-1 to DECTPU-77
 - bound procedure parameter value, (P) *Util Routines*, DECTPU-3
 - callable DECTPU, (P) *Util Routines*, DECTPU-1 to DECTPU-5
 - condition handler, (P) *Util Routines*, DECTPU-3 to DECTPU-4
 - examples, (P) *Util Routines*, DECTPU-4, DECTPU-7 to DECTPU-27
 - shareable image, (P) *Util Routines*, DECTPU-1, DECTPU-3

- DECTPU routines (cont'd)
 - user-written, (P) *Util Routines*, DECTPU-68 to DECTPU-77
 - INITIALIZE, (P) *Util Routines*, DECTPU-76
 - requirements, (P) *Util Routines*, DECTPU-7
- DECtrace, (G) *SW Overview*, 7-9
 - using with database applications, (S) *Dependable*, 8-50
- DEC Visual User Interface Tool
 - See VUIT
- DEC VTX
 - See VTX
- DECW\$DISPLAY logical name, (G) *DCL N-Z*, DCLII-127, DCLII-273
- DECW\$TAILOR utility
 - See DECwindows
- DEC WANrouter
 - See WANrouter
- DECwindows
 - Tailoring utility (DECW\$TAILOR)
 - supported on Alpha systems, (S) *Comparison*, 2-5
 - use of Snapshot facility with, (S) *Sys Mgr Essentials*, 4-21
 - %DECWINDOWS built-in symbol, (P) *Debugger*, B-5
 - DECwindows Motif interface, (G) *SW Overview*, 5-4
 - DECwindows Motif software, (G) *SW Overview*, 5-2 to 5-6; (G) *Compatibility*, 1-3; (P) *Concepts*, 7-7
 - client/server software, (G) *SW Overview*, 2-11, 6-17; (P) *Environment*, 3-3
 - debugger, (P) *Debugger*, 1-1
 - displaying on other workstation, (P) *Debugger*, 2-8
 - DEClinks, (P) *Environment*, 2-4
 - disabled debugger commands, (P) *Debugger*, 1-14
 - distributed features, (G) *SW Overview*, 2-11; (P) *Environment*, 3-3
 - FileView, (G) *SW Overview*, 5-5, 5-9
 - for POLYCENTER Software Installation utility, (S) *Sys Mgr Essentials*, 3-18
 - graphical user interface, (G) *SW Overview*, 1-3
 - portable user interfaces, (G) *SW Overview*, 2-4
 - programming libraries and tools, (G) *SW Overview*, 4-17; (P) *Environment*, 2-3
 - used with DEC Open3D, (P) *Environment*, 2-6
- DECwindows screens, clearing, (S) *Security*, 3-11, 3-15, 3-20
- DECwindows software
 - not in C2 evaluation, (S) *Security*, C-3
- Dedicated port, (S) *Sys Mgmt Util A-L*, 13-10, 13-36
 - displaying, (S) *Sys Mgmt Util A-L*, 13-52
- Deductible resource, (S) *Sys Mgr Essentials*, 6-3
- Default access, (S) *DECnet Intro*, 3-8; (S) *DECnet Mgmt*, 5-3
- DECnet nonprivileged accounts, (S) *DECnet Intro*, 3-11
- DEFAULT ACCESS parameter, (S) *DECnet Mgmt*, 2-34
 - for NCP commands, (S) *DECnet Intro*, 3-36
- DEFAULT account
 - in UAF, (S) *Sys Mgr Essentials*, 6-6
- Default boot procedure, (S) *Sys Mgr Essentials*, 4-2
- Default characteristics
 - modifying terminal, (G) *DCL N-Z*, DCLII-216 to DCLII-228
 - setting for magnetic tape devices, (G) *DCL N-Z*, DCLII-171
- Default condition handlers, (P) *Calling Std*, 6-17
- Default directories
 - setting, (P) *Sys Svc II*, SYS2-240
- Default error checking
 - controlling, (G) *DCL N-Z*, DCLII-175
- Default extension option, (P) *File Appl*, 4-35
- Default extension quantity, (P) *Rec Mgmt Util*, 4-19; (P) *File Appl*, 3-5 to 3-7
- Default file protection
 - setting, (P) *Sys Svc II*, SYS2-242
- Default file specifications, (P) *File Appl*, 9-6
- Default form, (S) *Sys Mgr Essentials*, 13-63; (P) *Sys Svc II*, SYS2-328
- Default nonprivileged DECnet accounts
 - use in access control, (S) *DECnet Mgmt*, 2-33, 3-68
- Default ownership
 - for directories, (S) *Security*, 8-22
 - for files, (S) *Security*, 8-19
 - for protected objects, (S) *Security*, 8-15, 8-22
- Default parameter file, (S) *Sys Mgmt Util A-L*, 6-7
- Default procedure signature, (P) *Calling Std*, 3-28
- Default protection, (P) *Rec Mgmt Util*, 4-23
 - Alpha system files, (S) *Security*, 8-26
 - for directories, (S) *Security*, 5-11
 - for files, (S) *Security*, 5-10
 - for NET\$PROXY.DAT, (S) *Sys Mgmt Util A-L*, 5-3
 - for NETPROXY.DAT, (S) *Sys Mgmt Util A-L*, 5-3
 - for processes, (S) *Security*, 8-16, 8-19
 - for RIGHTSLIST.DAT, (S) *Sys Mgmt Util A-L*, 5-3
 - for SYSUAF.DAT, (S) *Sys Mgmt Util A-L*, 5-3
 - for VAX system files, (S) *Security*, B-1
 - management, (S) *Security*, 8-15

Default Protection ACEs, (S) *Security*, 4-27, 8-20;
(S) *Sys Mgmt Util A-L*, 1-11
generating default file protection, (S) *Security*,
5-10

Defaults, (S) *DECams*, 5-1 to 5-2
collection intervals, (S) *DECams*, 5-14
data display, (S) *DECams*, 2-4
definition, (G) *User*, 2-19
file protection, (G) *User*, 19-5
for DCL commands, (G) *User*, 3-5
options, (S) *DECams*, 2-4
restoring from within command procedures,
(G) *User*, 15-17
saving from within command procedures, (G)
User, 15-17
setting data collection, (S) *DECams*, 5-3
values provided by system, (G) *User*, 3-5

Default UICs
See also UICs
changing, (G) *DCL N-Z*, DCLII-231

Default user authorization records
modifying, (S) *Sys Mgmt Util A-L*, 5-27

Default value for revision date and time, (P) *RMS
Ref*, 8-3

Default values
AREA, (P) *Rec Mgmt Util*, 4-6
DATE, (P) *Rec Mgmt Util*, 4-15
FILE, (P) *Rec Mgmt Util*, 4-16
key, (P) *Rec Mgmt Util*, 4-25
RECORD, (P) *Rec Mgmt Util*, 4-31
SYSTEM, (P) *Rec Mgmt Util*, 4-36

Default working set
for batch jobs, (G) *DCL A-M*, DCLI-280; (G)
DCL N-Z, DCLII-375, DCLII-412
modifying size, (G) *DCL N-Z*, DCLII-239

DEFAULT_NAME attribute, (P) *Rec Mgmt Util*,
4-18

Deferred-write processing, (P) *File Appl*, 9-8

DEFERRED_WRITE attribute, (P) *Rec Mgmt
Util*, 4-19; (P) *File Appl*, 7-18, 7-19

DEFINE/CHARACTERISTIC command, (G) *DCL
A-M*, DCLI-121 to DCLI-122; (S) *Sys Mgr
Essentials*, 13-58

DEFINE CIRCUIT command, (S) *DECnet Mgmt
Util*, 3-57

DEFINE command, (G) *User*, 13-3, 13-4;
(G) *DCL A-M*, DCLI-115 to DCLI-120; (P)
Concepts, 10-2; (P) *File Appl*, 6-13; (P)
Debugger, 12-6; (P) *Alpha SDA*, SDA-40,
SDA-42; (P) *VAX SDA*, SDA-48
access modes, (G) *User*, 13-9, 13-10
defining the LNK\$LIBRARY logical name, (P)
Linker, LINK-40
establishing permanent network database, (S)
DECnet Intro, 3-10, 3-33
in network operations, (S) *DECnet Intro*, 2-5
in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-19
/KEY qualifier in Mail, (G) *User*, 6-20

DEFINE command

/KEY qualifier in Mail (cont'd)
in initialization file, (G) *User*, 6-21
NCP, (S) *Sys Mgr Tuning*, 21-11
/TRANSLATION_ATTRIBUTES qualifier, (P)
File Appl, 5-7
using with public directories, (S) *DECnet Intro*,
2-5

DEFINE DEVICE command
in LANCP utility, (S) *Sys Mgmt Util A-L*,
12-11

DEFINE EXECUTOR command, (S) *Comparison*,
6-7; (S) *DECnet Mgmt Util*, 3-64

DEFINE/FORM command, (G) *DCL A-M*,
DCLI-123 to DCLI-126; (S) *Sys Mgr
Essentials*, 13-61
for controlling line overflow, (S) *Sys Mgr
Essentials*, 13-44

DEFINE/KEY command, (G) *DCL A-M*,
DCLI-127 to DCLI-130; (S) *Sys Mgmt Util
M-Z*, B-3; (P) *Debugger*, 12-8
in LATCP, (S) *Sys Mgmt Util A-L*, 13-17
in Show Cluster utility, (S) *Sys Mgmt Util
M-Z*, 4-33

DEFINE LINE command, (S) *DECnet Mgmt Util*,
3-77

DEFINE LOGGING command, (S) *DECnet Intro*,
4-5

DEFINE LOGGING EVENTS command, (S)
DECnet Mgmt Util, 3-86

DEFINE LOGGING STATE command, (S)
DECnet Mgmt Util, 3-88

DEFINE MODULE CONFIGURATOR command,
(S) *DECnet Mgmt Util*, 3-90

DEFINE MODULE X25-ACCESS command, (S)
DECnet Mgmt Util, 3-92

DEFINE MODULE X25-PROTOCOL command,
(S) *DECnet Mgmt Util*, 3-94

DEFINE MODULE X25-SERVER command, (S)
DECnet Mgmt Util, 3-100

DEFINE MODULE X29-SERVER command, (S)
DECnet Mgmt Util, 3-100

DEFINE NODE CIRCUIT command, (S) *DECnet
Mgmt Util*, 3-111

DEFINE NODE command, (S) *DECnet Intro*,
3-18; (S) *DECnet Mgmt Util*, 3-106
in LANCP utility, (S) *Sys Mgmt Util A-L*,
12-13

DEFINE OBJECT command, (S) *DECnet Mgmt
Util*, 3-113

DEFINE/PROCESS_GROUP command, (P)
Debugger, 14-12

Defining a form, (S) *Sys Mgr Essentials*, 13-61

Defining symbols to USEROPEN routine, (P) *File
Appl*, 5-10

- Defragmenting disks, (S) *Sys Mgr Essentials*, 10-48; (S) *Comparison*, 3-3
- DEFZA Ethernet device, (S) *DECnet Mgmt*, 2-10
- DEFZA FDDI device, (S) *DECnet Mgmt*, 2-11
- DEINSTALL command
 - in SYSGEN, (S) *Sys Mgmt Util M-Z*, 5-11
- Deinstalling layered software products, (S) *Sys Mgr Essentials*, 3-34
- Delaying command processing, (G) *DCL N-Z*, DCLII-426
- Delaying execution of a thread, (P) *DECthreads*, pthread-39, cma-41
- Delay timer, (S) *DECnet Mgmt*, 3-43
- Delete access, (P) *Rec Mgmt Util*, 4-23
 - common event flag clusters, (S) *Security*, 5-3
 - explicitly assigning, (S) *Sys Mgr Essentials*, 9-11
 - files, (S) *Security*, 5-8
 - for disk directory files, (S) *Sys Mgr Essentials*, 9-11
 - for disk files, (S) *Sys Mgr Essentials*, 9-6
 - granting through protection codes, (S) *Security*, 4-25; (S) *Sys Mgr Essentials*, 11-8
 - logical name tables, (S) *Security*, 5-16
 - queues
 - through ACLs, (S) *Security*, 5-17
 - through protection codes, (S) *Security*, 5-17
 - volumes, (S) *Security*, 5-21
- DELETE attribute, (P) *Rec Mgmt Util*, 4-3, 4-35; (P) *File Appl*, 7-3
- DELETE/CHARACTERISTIC command, (G) *DCL A-M*, DCLI-135; (S) *Sys Mgr Essentials*, 13-59
- DELETE command, (G) *User*, 4-15; (G) *DCL A-M*, DCLI-131 to DCLI-134; (P) *File Appl*, 10-26; (P) *Debugger*, 12-6
 - /ENTRY qualifier, (G) *User*, 18-18, 18-19
 - in CLUE, (S) *Sys Mgmt Util A-L*, 8-5
 - in Install utility, (S) *Sys Mgmt Util A-L*, 11-10
 - in Mail, (G) *User*, 6-15
 - in network operations, (S) *DECnet Intro*, 2-7
 - using with F\$SEARCH lexical function, (G) *User*, 17-11
- DELETE/ENTRY command, (G) *DCL A-M*, DCLI-136 to DCLI-138; (S) *Sys Mgr Essentials*, 13-81
- Delete file function, (P) *I/O User*, 1-28
- DELETE/FORM command, (G) *DCL A-M*, DCLI-139; (S) *Sys Mgr Essentials*, 13-64
- DELETE/INTRUSION_RECORD command, (G) *DCL A-M*, DCLI-140
- Delete key, (G) *User*, 3-17, 3-19; (P) *I/O User*, 5-5
- DELETE/KEY command, (G) *DCL A-M*, DCLI-141 to DCLI-142; (P) *Debugger*, 12-9
- DELETE LINK command
 - in LATCP, (S) *Sys Mgmt Util A-L*, 13-19
- DELETE PORT command
 - in LATCP, (S) *Sys Mgmt Util A-L*, 13-20
- /DELETE qualifier
 - LIBRARY command, (P) *Concepts*, 17-2
- DELETE/QUEUE command, (G) *DCL A-M*, DCLI-143 to DCLI-144; (S) *Sys Mgr Essentials*, 13-57
- DELETE QUEUE_ENTRY command
 - in LATCP, (S) *Sys Mgmt Util A-L*, 13-21
- Delete service, (P) *RMS Ref*, RMS-22; (P) *File Appl*, 8-2, 8-4
 - condition values, (P) *RMS Ref*, RMS-23
 - control block input fields, (P) *RMS Ref*, RMS-23
 - control block output fields, (P) *RMS Ref*, RMS-23
 - high-level language equivalents, (P) *File Appl*, 8-2
 - program example, (P) *RMS Ref*, A-30
 - requirements, (P) *RMS Ref*, RMS-23
 - run-time options, (P) *File Appl*, 9-18
 - use restrictions, (P) *RMS Ref*, RMS-22
- DELETE SERVICE command
 - in LATCP, (S) *Sys Mgmt Util A-L*, 13-21
- DELETE/SYMBOL command, (G) *DCL A-M*, DCLI-145 to DCLI-146
- DELETE_ON_CLOSE attribute, (P) *Rec Mgmt Util*, 4-19, 4-24
- Deleting
 - attributes object, (P) *DECthreads*, cma-13
 - batch job file after processing, (G) *DCL N-Z*, DCLII-407
 - characters in command line, (G) *User*, 3-17
 - condition variable attributes object, (P) *DECthreads*, pthread-25
 - DECdns objects, (P) *Sys Svc I*, SYS1-224
 - event flag clusters, (P) *Sys Svc I*, SYS1-217
 - files from the system disk, (S) *Sys Mgr Essentials*, 5-1
 - forms, (S) *Sys Mgr Essentials*, 13-64
 - problems with, (S) *Sys Mgr Essentials*, 13-82
 - global sections, (P) *Sys Svc I*, SYS1-204
 - intrusion records, (P) *Sys Svc I*, SYS1-181
 - jobs, (S) *Sys Mgr Essentials*, 13-74
 - logical names, (G) *DCL A-M*, DCLI-106; (P) *Sys Svc I*, SYS1-186
 - logical name tables, (G) *DCL A-M*, DCLI-106
 - mailboxes, (P) *Sys Svc I*, SYS1-189
 - multiple files, (G) *DCL A-M*, DCLI-131
 - page, swap, and dump files
 - after creating new version, (S) *Sys Mgr Tuning*, 15-28
 - caution, (S) *Sys Mgr Tuning*, 15-21
 - processes, (P) *Sys Svc I*, SYS1-191
 - proxies, (P) *Sys Svc I*, SYS1-183

Deleting (cont'd)

- queue characteristics, (S) *Sys Mgr Essentials*, 13-59
- problems with, (S) *Sys Mgr Essentials*, 13-82
- queues, (S) *Sys Mgr Essentials*, 13-57
- problems with, (S) *Sys Mgr Essentials*, 13-82
- thread attributes object, (P) *DECthreads*, pthread-5
- virtual address space, (P) *Sys Svc I*, SYS1-193
- wakeup request, (G) *DCL N-Z*, DCLII-57
- Deleting a condition variable, (P) *DECthreads*, pthread-27, cma-32
- Deleting an event, (S) *DECcmds*, 2-8
- Deleting a thread, (P) *DECthreads*, pthread-40, cma-63
- Deletion operations, (P) *SMG\$*, 2-7
- Delimiters
 - using in control block arguments, (P) *RMS Ref*, A-5, A-6, A-7
- Delimiting characters
 - in FDL source code, (P) *Rec Mgmt Util*, 6-1
- Delivery of alerts
 - disabling, (P) *DECthreads*, cma-5
 - disabling asynchronous delivery of, (P) *DECthreads*, cma-3
 - enabling, (P) *DECthreads*, cma-8
 - enabling asynchronous delivery of, (P) *DECthreads*, cma-6
 - requesting, (P) *DECthreads*, cma-10
- Delivery of cancels
 - enabling and disabling, (P) *DECthreads*, pthread-68
 - enabling and disabling asynchronous delivery of, (P) *DECthreads*, pthread-66
 - requesting, (P) *DECthreads*, pthread-75
- DELNI
 - Ethernet device, (S) *DECnet Intro*, 1-7
- DEL option, (P) *Rec Mgmt Util*, 4-35
- DELQA Ethernet device, (S) *DECnet Mgmt*, 2-10
- Delta time, (P) *Concepts*, 5-1
 - as input to \$BINTIM, (P) *Sys Svc I*, SYS1-62
 - combined with absolute time, (G) *User*, 3-13
 - converting to numeric, (P) *Sys Svc II*, SYS2-163
 - default values, (G) *User*, 3-12
 - example, (P) *Concepts*, 5-6
 - in system format, (P) *Concepts*, 5-6
 - rules for entering, (G) *User*, 3-12
 - syntax, (G) *User*, 3-12
- Delta/XDelta Debugger (DELTA/XDELTA), (G) *SW Overview*, 4-7; (P) *Environment*, 9-8
- Refer also to the *OpenVMS Delta/XDelta Debugger Manual*
- differences, (G) *Compatibility*, 1-11
- OpenVMS Alpha, (G) *Compatibility*, 4-10

- DELUA Ethernet device, (S) *DECnet Mgmt*, 2-10
- Demand-zero compression, (P) *Linker*, 3-25
 - controlling, (P) *Linker*, 3-25, LINK-50
- Demand Zero Fault Rate, (S) *Alpha Perform*, 10-4
- Demand-zero image sections
 - creating, (P) *Linker*, 3-25, LINK-10, LINK-50
 - definition, (P) *Linker*, LINK-50
 - disabling creation of, (P) *Linker*, LINK-10
 - maximum number of, (P) *Linker*, LINK-57
- /DEMAND_ZERO qualifier, (P) *Linker*, LINK-10
- DEMFA Ethernet device, (S) *DECnet Mgmt*, 2-10
- DEMFA FDDI device, (S) *DECnet Mgmt*, 2-11
- DEMNA Ethernet device, (S) *DECnet Mgmt*, 2-10
- /DENSITY qualifier
 - in Backup utility, (S) *Sys Mgmt Util A-L*, 7-27
 - in Mount utility, (S) *Sys Mgmt Util M-Z*, 2-19
- Dependability, (G) *SW Overview*, 7-2
 - analyzing system requirements, (S) *Dependable*, 2-1
 - application software features, (S) *Dependable*, 8-35 to 8-58
 - balance, (S) *Dependable*, 1-17
 - building blocks, (S) *Dependable*, 1-14 to 1-15
 - business needs analysis, (S) *Dependable*, 2-5
 - characteristics summary, (S) *Dependable*, 6-20
 - communications
 - options, (S) *Dependable*, 3-5 to 3-7
 - concepts, (S) *Dependable*, 1-8
 - constraints, (S) *Dependable*, 4-1
 - continuous improvement, (S) *Dependable*, 2-1 to 2-3
 - cost tradeoffs, (S) *Dependable*, 4-16
 - determining adequacy, (S) *Dependable*, 2-1
- Digital consulting support packages, (S) *Dependable*, 10-1
- enhancements to a sample configuration, (S) *Dependable*, 6-5
- environmental factors
 - options, (S) *Dependable*, 3-2 to 3-3
- hardware
 - options, (S) *Dependable*, 3-3 to 3-5
- identifying constraints, (S) *Dependable*, 4-1
- maintaining dependable environment, (S) *Dependable*, 5-1
- managing shared information, (S) *Dependable*, 8-58 to 8-61
- meeting changing requirements, (S) *Dependable*, 1-4
- network design, (S) *Dependable*, 7-1, 7-17 to 7-19
- OpenVMS features, (S) *Dependable*, 8-10 to 8-28
- OpenVMS systems, (G) *SW Overview*, 2-12
- operational procedures
 - options, (S) *Dependable*, 3-12 to 3-14
- personnel
 - options, (S) *Dependable*, 3-15 to 3-16
- primary strategies

Dependability

primary strategies (cont'd)

- concepts, (S) *Dependable*, 1-10
- principles, (S) *Dependable*, 2-1
- prioritizing requirements, (S) *Dependable*, 2-8
- prototyping applications, (S) *Dependable*, 8-31 to 8-33

publications related to

See Bibliography

- quality process phases, (S) *Dependable*, 2-1
- requirements and responses, (S) *Dependable*, 2-4

requirements for a sample company, (S)

Dependable, 2-9

software

- options, (S) *Dependable*, 3-7 to 3-12
- software applications, (S) *Dependable*, 8-1
- taking action, (S) *Dependable*, 2-11
- terms, (S) *Dependable*, 1-5
- testing applications, (S) *Dependable*, 8-33 to 8-34
- testing software, (S) *Dependable*, 3-10
- TP monitors, (S) *Dependable*, 8-53
- understanding your options, (S) *Dependable*, 3-1
- with CDD/Repository, (S) *Dependable*, 8-59
- writing dependable code, (S) *Dependable*, 8-29 to 8-31

Dependability constraints

- in wide area networks, (S) *Dependable*, 3-6

Dependability terms, (S) *Dependable*, 1-5 to 1-7

Dependable computing, (S) *Dependable*, 1-1

- analyzing system requirements, (S)

Dependable, 2-1

- application software features, (S) *Dependable*, 8-35 to 8-58

- building blocks, (S) *Dependable*, 1-14

- business examples, (S) *Dependable*, 1-2

- communications, (S) *Dependable*, 1-15 to 1-16

- options, (S) *Dependable*, 3-5 to 3-7

- Digital consulting support packages, (S)

Dependable, 10-1

- disaster tolerant level, (S) *Dependable*, 1-2

- environmental factors, (S) *Dependable*, 1-15 to 1-16

- options, (S) *Dependable*, 3-2 to 3-3

- hardware, (S) *Dependable*, 1-15 to 1-16

- options, (S) *Dependable*, 3-3 to 3-5

- highly available level, (S) *Dependable*, 1-1

- maintaining dependable environment, (S)

Dependable, 5-1

- managing shared information, (S) *Dependable*, 8-58 to 8-61

- OpenVMS features, (S) *Dependable*, 8-10 to 8-28

- operational procedures, (S) *Dependable*, 1-15 to 1-16

- options, (S) *Dependable*, 3-12 to 3-14

Dependable computing (cont'd)

- personnel, (S) *Dependable*, 1-15 to 1-16

- options, (S) *Dependable*, 3-15 to 3-16

- prototyping applications, (S) *Dependable*, 8-31 to 8-33

- redundant functional units, (S) *Dependable*, 1-13 to 1-14

- software, (S) *Dependable*, 1-15 to 1-16

- options, (S) *Dependable*, 3-7 to 3-12

- testing applications, (S) *Dependable*, 8-33 to 8-34

- understanding your options, (S) *Dependable*, 3-1

- writing dependable code, (S) *Dependable*, 8-29 to 8-31

Dependable computing systems

- balancing with other business considerations, (S) *Dependable*, 4-1

Dependent software products, (S) *Sys Mgr*

Essentials, 3-27

DEPOSIT command, (G) *DCL A-M*, DCLI-147 to

DCLI-150; (P) *Debugger*, 8-3

- length qualifiers, (G) *DCL A-M*, DCLI-148

- radix qualifiers, (G) *DCL A-M*, DCLI-148

Depositing

- DEPOSIT command, (P) *Debugger*, 8-3

- instruction, (P) *Debugger*, 8-21, 15-12

- into address, (P) *Debugger*, 8-25

- into register, (P) *Debugger*, 3-24, 8-22, 15-4

- into variable, (P) *Debugger*, 3-20, 8-3, 8-14

- into vector register, (P) *Debugger*, 15-4

- vector instruction, (P) *Debugger*, 15-12

DEPTH attribute, (P) *Rec Mgmt Util*, 4-5

DEQNA Ethernet device, (S) *DECnet Mgmt*, 1-4, 2-10

Dequeue, (P) *DECthreads*, 2-18

Dequeuing lock requests, (P) *Sys Svc I*, SYS1-195

Descriptor dump, (G) *DCL A-M*, DCLI-183

Descriptors, (P) *STR\$*, 2-7

- Alpha argument item, (P) *Calling Std*, 3-48

- analysis of, (P) *STR\$*, 2-4

- arrays, (P) *Calling Std*, 5-4

- BASIC file array, (P) *Calling Std*, 5-23

- class, (P) *Interfaces*, 2-19

- class codes, (P) *Interfaces*, 1-10; (P) *Calling Std*, 5-23

- compression text, (P) *Calling Std*, 5-23

- data type, (P) *Interfaces*, 2-19

- decimal strings, (P) *Calling Std*, 5-8

- definition, (P) *Calling Std*, 1-4

- dynamic strings, (P) *Calling Std*, 5-4

- fields, (P) *Interfaces*, 2-15

- fixed length, (P) *Calling Std*, 5-3

- format, (P) *Calling Std*, 5-1

formats

- DSC\$K_CLASS_A, (P) *Calling Std*, 5-4

- DSC\$K_CLASS_D, (P) *Calling Std*, 5-4

Descriptors

formats (cont'd)

- DSC\$K_CLASS_NCA, (P) *Calling Std*, 5-10
- DSC\$K_CLASS_P, (P) *Calling Std*, 5-8
- DSC\$K_CLASS_S, (P) *Calling Std*, 5-3
- DSC\$K_CLASS_SB, (P) *Calling Std*, 5-21
- DSC\$K_CLASS_SD, (P) *Calling Std*, 5-8
- DSC\$K_CLASS_UBA, (P) *Calling Std*, 5-18
- DSC\$K_CLASS_UBS, (P) *Calling Std*, 5-17
- DSC\$K_CLASS_UBSB, (P) *Calling Std*, 5-22
- DSC\$K_CLASS_VS, (P) *Calling Std*, 5-13
- DSC\$K_CLASS_VSA, (P) *Calling Std*, 5-15
- prototype, (P) *Calling Std*, 5-2
- label, (P) *Calling Std*, 5-23
- noncontiguous arrays, (P) *Calling Std*, 5-10
- procedure, (P) *Calling Std*, 5-8
- strings with bounds, (P) *Calling Std*, 5-21
- unaligned bit arrays, (P) *Calling Std*, 5-18
- unaligned bit strings, (P) *Calling Std*, 5-17
- unaligned bit strings with bounds, (P) *Calling Std*, 5-22
- variable buffer, (P) *Calling Std*, 5-23
- varying string arrays, (P) *Calling Std*, 5-15
- varying strings, (P) *Calling Std*, 5-13
- DESELECT command
 - in SHOW CLUSTER, (S) *Sys Mgr Tuning*, 20-13
 - in Show Cluster utility, (S) *Sys Mgmt Util M-Z*, 4-35
- Design graphics mode, (P) *File Appl*, 4-11
- Designing dependable systems, (S) *Dependable*, 8-29 to 8-30
- Designing emergency drills, (S) *Dependable*, 1-4
- Designing procedures, (P) *Modular Proc*, 2-1
- Design mnemonic, (P) *File Appl*, 4-13
- Desktop ACMS
 - features, (S) *Dependable*, 8-58
- Desktop environments, (S) *Dependable*, 5-5
- DESNCR (Digital Ethernet Secure Network Controller), (G) *SW Overview*, 6-7
- Despooling a spooled printer, (S) *Sys Mgr Essentials*, 7-15
- DESPA Ethernet device, (S) *DECnet Mgmt*, 2-10
- Destination for installing software
 - copying files, (S) *Sys Mgr Essentials*, 3-33
 - PCSI\$DESTINATION location, (S) *Sys Mgr Essentials*, 3-28
 - specifying location, (S) *Sys Mgr Essentials*, 3-28
- Destination parameter
 - in VMSINSTAL.COM, (S) *Sys Mgr Essentials*, 3-12
- DESPA Ethernet device, (S) *DECnet Mgmt*, 2-10
- Detached processes, (P) *Concepts*, 1-1
 - See also Processes and Subprocesses
 - accounting, (G) *DCL N-Z*, DCLII-57
 - assigning resource quotas to, (G) *DCL N-Z*, DCLII-56
 - base priority, (S) *Alpha Perform*, 6-21
 - creating, (G) *DCL N-Z*, DCLII-63; (P) *Concepts*, 1-10; (P) *Sys Svc I*, SYS1-150
 - creating with RUN command, (G) *DCL N-Z*, DCLII-55
 - defining attributes, (G) *DCL N-Z*, DCLII-56
 - defining equivalence names for process-permanent logical names, (G) *DCL N-Z*, DCLII-55
 - establishing values for, (S) *VAX Perform*, 5-5; (S) *Alpha Perform*, 17-4
 - image hibernation, (G) *DCL N-Z*, DCLII-57
 - names, (G) *DCL N-Z*, DCLII-61
 - naming, (G) *DCL N-Z*, DCLII-57
 - scheduling wakeup, (G) *DCL N-Z*, DCLII-59
 - specifying quotas, (G) *DCL N-Z*, DCLII-59
 - specifying working set, (G) *DCL N-Z*, DCLII-63
 - working set characteristics, (S) *Alpha Perform*, 6-2
- DETACH privilege, (S) *Security*, A-5; (S) *DECnet Mgmt*, 5-1
- Detected bad block files
 - See DBDFs
- DEUNA Ethernet device, (S) *DECnet Intro*, 3-34; (S) *DECnet Mgmt*, 1-4, 2-10
- \$DEVDEF macro
 - source of DEV field bit definitions, (P) *RMS Ref*, 4-7
- Development environments for dependable systems, (S) *Dependable*, 8-58 to 8-60
- Device access, controlling through access control lists, (P) *Util Routines*, ACL-1
- Device addresses
 - See LAN addresses
- DEVICE attribute, (P) *Rec Mgmt Util*, 4-36
- Device characteristics
 - disk, (P) *I/O User*, 2-25
 - LAN drivers, (P) *I/O User*, 9-22
 - magnetic tape, (P) *I/O User*, 3-8
 - mailbox, (P) *I/O User*, 4-4
 - pseudoterminal, (P) *I/O User*, 6-3
 - terminal, (P) *I/O User*, 5-20
- Device control libraries, (S) *Sys Mgr Essentials*, 13-44 to 13-45
 - assigning to a queue, (S) *Sys Mgr Essentials*, 13-66
 - order of module output, (S) *Sys Mgr Essentials*, 13-45
 - procedure for using, (S) *Sys Mgr Essentials*, 13-65

Device control libraries (cont'd)

- sample commands, (S) *Sys Mgr Essentials*, 13-68
- setting up, (S) *Sys Mgr Essentials*, 13-44
- Device control modules, (S) *Sys Mgr Essentials*, 13-44 to 13-83
- Device data blocks
 - See DDBs
- Device driver routines
 - address, (P) *Alpha SDA*, SDA-94; (P) *VAX SDA*, SDA-105
- Device drivers, (G) *SW Overview*, 1-7
 - addresses, (S) *Sys Mgmt Util M-Z*, 5-28
 - asynchronous DDCMP driver, (S) *DECnet Intro*, 3-19, 3-25
 - base address of driver prologue table (DPT), (P) *VAX SDA*, SDA-18
 - configuring, (S) *Sys Mgmt Util M-Z*, 5-5, 5-27; (S) *Comparison*, A-8
 - CONINTERR.EXE file, (S) *Sys Mgr Essentials*, 7-7
 - connecting, (S) *Sys Mgmt Util M-Z*, 5-9
 - debugging, (G) *Compatibility*, 4-11
 - disks, (P) *I/O User*, 2-1
 - displaying on Alpha systems, (S) *Sys Mgmt Util M-Z*, 6-40
 - documentation, (G) *Compatibility*, 3-10
 - DSDRIVER, (S) *VMScluster Sys*, 1-4, 2-17
 - DUDRIVER, (S) *VMScluster Sys*, 1-4, 2-17
 - for event handling, (S) *Sys Mgr Essentials*, 7-7
 - LAN, (P) *I/O User*, 9-2
 - LAT port, (P) *I/O User*, 5-1
 - load balancing, (S) *VMScluster Sys*, 6-17
 - loading, (S) *Sys Mgmt Util M-Z*, 5-5, 5-9, 5-14; (S) *VMScluster Sys*, 5-9
 - automatically, (S) *Sys Mgr Essentials*, 7-6
 - in system startup, (S) *Sys Mgr Essentials*, 5-4, 5-7
 - manually (Alpha), (S) *Sys Mgr Essentials*, 7-8
 - manually (VAX), (S) *Sys Mgr Essentials*, 7-7
 - loading on Alpha systems, (S) *Sys Mgmt Util M-Z*, 6-37
 - locating, (P) *VAX SDA*, SDA-18
 - locating a failing instruction, (P) *VAX SDA*, SDA-27
 - magnetic tape, (P) *I/O User*, 3-1
 - mailbox, (P) *I/O User*, 4-1
 - not associated with a specific device, (S) *Sys Mgr Essentials*, 7-7
 - OpenVMS, (G) *SW Overview*, 3-3
 - PADRIVER, (S) *VMScluster Sys*, 1-6
 - PEDRIVER, (S) *VMScluster Sys*, 1-6, G-3
 - PIDRIVER, (S) *VMScluster Sys*, 1-6
 - PNDRIVER, (S) *VMScluster Sys*, 1-6
 - port, (S) *VMScluster Sys*, 1-5
 - pseudoterminal, (P) *I/O User*, 6-1

Device drivers (cont'd)

- replacing with new version of, (S) *Sys Mgmt Util M-Z*, 5-15
- SCSI, (P) *I/O User*, 2-17
- SCSI disk class, (P) *I/O User*, 2-18
- shadow set virtual unit, (P) *I/O User*, 7-1
- showing configuration of, (S) *Sys Mgmt Util M-Z*, 5-24
- showing information, (S) *Sys Mgmt Util M-Z*, 5-27, 5-28; (S) *Comparison*, A-8
- Step 1 interface, (G) *Compatibility*, 4-9
- Step 2 interface, (G) *Compatibility*, 4-9
- terminal, (P) *I/O User*, 5-1
- TTDRIVER, (S) *Sys Mgr Essentials*, 7-11
- TUDRIVER, (S) *VMScluster Sys*, 1-4, 2-18
- user-written, (G) *SW Overview*, 3-3; (G) *Compatibility*, 1-10, 4-9
- VAXstation 2000 and MicroVAX 2000 disk, (P) *I/O User*, 2-17
- written in C, (G) *Compatibility*, 4-9
- Device field, (G) *User*, 4-2
- Device IDs
 - configuring for SCSI, (G) *V6.2 New Feat*, 7-21
- Device names, (S) *Sys Mgr Essentials*, 7-1
 - assigning logical names to, (G) *DCL A-M*, DCLI-40, DCLI-115
- DECnet, (S) *DECnet Intro*, 3-33
- for virtual terminals, (S) *Sys Mgr Essentials*, 7-11
- generic, (G) *User*, 12-9; (G) *DCL A-M*, DCLI-14
- in a VMScluster environment, (S) *Sys Mgr Essentials*, 7-1
- logical, (G) *User*, 12-9
- physical, (G) *User*, 12-8; (P) *Interfaces*, B-6
- specifying, (S) *Sys Mgmt Util M-Z*, 5-7, 5-9
- specifying in a command, (G) *User*, 12-9
- VMScluster, (G) *User*, 12-10
- DEVICE phase of system startup, (S) *Sys Mgr Essentials*, 5-4, 5-18
- /DEVICE qualifier, (P) *Alpha SDA*, SDA-124; (P) *VAX SDA*, SDA-141
- Devices, (G) *User*, 12-1
 - Refer also to the *OpenVMS VAX Device Support Manual* and the *OpenVMS VAX Device Support Reference Manual*
 - See also Disks, Printers, and Terminals
 - access, (G) *DCL A-M*, DCLI-14
 - accessing, (G) *User*, 12-1
 - accessing files, (G) *User*, 12-8
 - accessing in batch job, (S) *Sys Mgr Essentials*, 8-46
 - accessing volume sets, (G) *User*, 12-8
 - access requirements, (S) *Security*, 5-4
 - allocating, (G) *User*, 12-3; (G) *DCL A-M*, DCLI-14; (S) *Sys Mgr Essentials*, 8-9, 9-22; (P) *Concepts*, 9-31; (P) *Sys Svc I*, SYS1-22

Devices

- allocating (cont'd)
 - by device type, (G) *User*, 12-4
 - by logical name, (G) *User*, 12-4
 - command format, (G) *User*, 12-3
 - first available, (G) *User*, 12-3
 - generic devices, (G) *User*, 12-4
 - physical device, (G) *User*, 12-3
- as protected objects, (S) *Security*, 4-10
- assigning logical queue name to, (G) *DCL A-M*, DCLI-47
- availability
 - OPCOM message, (S) *Sys Mgr Essentials*, 8-59
- CI circuit, (S) *DECnet Mgmt*, 2-10
- configuring
 - in system startup, (S) *Sys Mgr Essentials*, 5-7, 7-6
 - manually, (S) *Sys Mgr Essentials*, 5-7, 7-7
 - special devices, (S) *Sys Mgr Essentials*, 7-7, 7-8
- configuring VAXstation 2000 and MicroVAX 2000 devices, (S) *Sys Mgmt Util M-Z*, D-6
- connecting, (S) *Sys Mgr Essentials*, 7-6
- connecting on Alpha systems, (S) *Sys Mgmt Util M-Z*, 6-33, 6-34
- controlling access through ACLs, (S) *Security*, 4-18
- creating, (G) *DCL N-Z*, DCLII-127
- DDCMP circuit, (S) *DECnet Mgmt*, 2-7
- deallocating, (G) *DCL A-M*, DCLI-105; (P) *Concepts*, 9-33; (P) *Sys Svc I*, SYS1-170
- default name, (P) *Concepts*, 9-27
- default security elements, (S) *Security*, 5-6
- determining available, (S) *Sys Mgr Essentials*, 7-2
- DEUNA, (S) *DECnet Intro*, 3-34
- Digital supplied, (S) *Sys Mgmt Util M-Z*, D-1
- dismounting, (G) *DCL A-M*, DCLI-178
- dismounting allocated, (G) *User*, 12-11
- displaying
 - default, (G) *DCL N-Z*, DCLII-259
 - information on, (G) *DCL N-Z*, DCLII-241
 - mounted volumes, (G) *DCL N-Z*, DCLII-263
 - queue entries, (G) *DCL N-Z*, DCLII-275, DCLII-320
 - status of, (G) *DCL N-Z*, DCLII-261
- displaying error count for, (G) *DCL N-Z*, DCLII-280
- displaying information, (G) *User*, 12-2
- displaying SDA information, (P) *Alpha SDA*, SDA-93; (P) *VAX SDA*, SDA-104
- displaying the default, (S) *Sys Mgmt Util M-Z*, 6-58
- DMC11, (S) *DECnet Mgmt*, 1-9
- DMF32, (S) *DECnet Mgmt*, 1-9
- DMP11, (S) *DECnet Mgmt*, 1-9

Devices (cont'd)

- DMR11, (S) *DECnet Mgmt*, 1-9
- dual-pathed, (S) *VMSccluster Sys*, 6-3; (P) *Sys Svc I*, SYS1-329
- dual-ported, (S) *VMSccluster Sys*, 6-2
- DZ11, (S) *DECnet Mgmt*, 1-9
- establishing as spooled, (G) *DCL N-Z*, DCLII-121
- establishing operational status for, (G) *DCL N-Z*, DCLII-121
- Ethernet adapter
 - specifying number for AUTOGEN, (S) *Sys Mgr Tuning*, 14-21
- Ethernet circuit, (S) *DECnet Mgmt*, 2-10
- Ethernet UNA, (S) *DECnet Intro*, 3-34
- events audited, (S) *Security*, 5-7
- excluding, (S) *Sys Mgmt Util M-Z*, 6-38
- FDDI circuit, (S) *DECnet Mgmt*, 2-11
- FDDI line, (S) *DECnet Mgmt*, 2-14
- getting information about, (S) *Sys Mgr Essentials*, 7-2, 7-16; (P) *Concepts*, 9-28
- getting information asynchronously, (P) *Sys Svc I*, SYS1-325
- getting information synchronously, (P) *Sys Svc I*, SYS1-345
- identifying, (G) *User*, 12-8
- implicit allocation, (P) *Concepts*, 9-33
- ISO-9660
 - getting information about, (S) *Sys Mgr Essentials*, 7-5
- LAN, (S) *DECnet Mgmt*, 2-14
- LAN communication, (G) *V6.2 New Feat*, 4-2
- lock name, (P) *Sys Svc I*, SYS1-333
- logical name assignment, (G) *DCL A-M*, DCLI-14
- logical name translation, (S) *Sys Mgmt Util M-Z*, 6-22
- LTA_n, (S) *Sys Mgr Essentials*, 7-11
- magnetic tapes
 - setting default characteristics for, (G) *DCL N-Z*, DCLII-171
- managing, (G) *SW Overview*, 3-9; (S) *Sys Mgr Essentials*, 7-1
- managing with LAN Control Program (LANCP) utility, (G) *V6.2 New Feat*, 6-4; (S) *Sys Mgr Tuning*, 22-9
- manually configuring non-standard devices, (S) *Sys Mgr Essentials*, 5-7, 7-7
- modifying, (G) *DCL N-Z*, DCLII-127
- modifying protection of, (G) *DCL N-Z*, DCLII-194
- modifying security profiles of, (S) *Security*, 5-6
- mounting volumes, (S) *Sys Mgr Essentials*, 8-18
- names, (P) *Concepts*, 9-26
- network communications
 - connecting, (S) *Sys Mgr Essentials*, 7-7, 7-8

Devices (cont'd)

- obtaining information about using F\$DEVI
 - lexical function, (G) *User*, 17-10
- on Alpha computers, (S) *Comparison*, 2-22
- OPA0:, (S) *Sys Mgr Essentials*, 2-23
- port error-log entries, (S) *VMScluster Sys*, C-27
- private, (G) *User*, 12-8
- privilege requirements, (S) *Security*, 5-7
- profile storage, (S) *Security*, 5-8
- protecting, (S) *Sys Mgr Essentials*, 7-5
- protecting BACKUP save sets, (S) *Security*, 8-29
- protection, (P) *Concepts*, 9-5
- QNA, (S) *DECnet Intro*, 3-33
- requiring manual connecting, (S) *Sys Mgr Essentials*, 7-8
- resetting default in SYSMAN, (S) *Sys Mgr Essentials*, 2-17
- reusing in C2 systems, (S) *Security*, C-9
- RTAn, (S) *Sys Mgr Essentials*, 7-11
- scanning of across the cluster, (P) *Sys Svc I*, SYS1-200
- SCSI support, (S) *VMScluster Sys*, 6-23; (P) *I/O User*, 7-2
- security, (G) *User*, 12-2
- security elements of, (S) *Security*, 5-3
- served, (P) *Sys Svc I*, SYS1-337
- setting characteristics, (S) *Sys Mgr Essentials*, 13-14
 - in system startup, (S) *Sys Mgr Essentials*, 13-14
- setting default, (G) *DCL N-Z*, DCLII-119
- setting defaults for file specifications, (S) *Sys Mgmt Util M-Z*, 6-54
- shared disks, (S) *VMScluster Sys*, 6-19
- special
 - connecting, (S) *Sys Mgr Essentials*, 7-8
- specifying physical device name, (G) *User*, 12-8
- specifying quotas for, (S) *Sys Mgmt Util M-Z*, 6-21
- spooled, (S) *Sys Mgr Essentials*, 13-14
- spooled, access requirements, (S) *Security*, 5-5
- status report on, (S) *Sys Mgr Tuning*, 18-17
- supported, (P) *I/O User*, 7-2
- suppressing autoconfiguration during system startup, (S) *Sys Mgr Essentials*, 5-8, 7-8
- template security profiles, (S) *Security*, 5-6
- terminal configuration, (S) *Security*, 8-31
- types of interconnect, (S) *VMScluster Sys*, 1-3
- unloading with DISMOUNT command, (G) *DCL A-M*, DCLI-180
- virtual, (G) *DCL A-M*, DCLI-212, DCLI-334
- volumes, (G) *User*, 12-2
- Volumes
 - private, (G) *User*, 12-2

- Device seed, (S) *Sys Mgmt Util A-L*, 13-28
- Device support
 - debugging device drivers, (P) *Environment*, 9-8
- Device table, (S) *Sys Mgmt Util M-Z*, D-1
- Device tests
 - running individually with UETP, (S) *Sys Mgr Tuning*, 17-32
- Device types, (P) *Concepts*, 9-28
 - codes, (S) *Sys Mgmt Util M-Z*, 5-6
 - descriptions, (S) *Sys Mgmt Util M-Z*, 5-6
- Device unavailable queue status, (S) *Sys Mgr Essentials*, 13-51
- device_name data type, (P) *Interfaces*, B-6
- DFL (data bucket fill size)
 - program example, (P) *RMS Ref*, A-19
- DFM32
 - choosing appropriate environment, (S) *VAX Perform*, 5-15
- DFS
 - See also DNS
 - supporting network dependability, (S) *Dependable*, 7-17
- DFW option, (P) *Rec Mgmt Util*, 4-19
- 2D graphics option, (P) *Environment*, 2-6
- 3D graphics option, (P) *Environment*, 2-6
- DHB32 device, (S) *DECnet Mgmt*, 2-7
- DHT32 device, (S) *DECnet Mgmt*, 2-7
- DHU11 device, (P) *I/O User*, 5-1
- DHV11 device, (P) *I/O User*, 5-1
- DIAGNOSE command, (S) *Sys Mgr Tuning*, 18-2
- DIAGNOSE privilege, (S) *Security*, A-6; (S) *DECnet Mgmt*, 5-2
- Diagnostic features
 - compilers, (G) *Compatibility*, 4-5
 - VEST, (G) *Compatibility*, 4-5
- Diagnostics
 - relationship to UETP, (S) *Sys Mgr Tuning*, 17-16
- Dialup identifiers, (S) *Security*, 4-3; (S) *Sys Mgr Essentials*, 11-11
- Dialup lines, (S) *DECnet Mgmt*, 5-12; (P) *I/O User*, 5-13
 - connection security, (S) *Security*, 12-16; (S) *DECnet Intro*, 3-21, 3-25, 3-37
 - controlling access, (S) *Security*, 3-2
 - controlling access to, (G) *User*, 2-5
 - using for dynamic asynchronous connection, (S) *Security*, 12-15; (S) *DECnet Intro*, 3-24
 - using for static asynchronous connection, (S) *DECnet Intro*, 3-4, 3-19, 3-20, 3-22, 3-24
 - using in a public area, (S) *Security*, 3-21
- Dialup logins, (S) *Security*, 3-5
 - breaking connections, (S) *Security*, 3-20
 - controlling retries, (S) *Security*, 7-24
 - failures, (S) *Security*, 3-9
 - retries, (S) *Security*, 3-9

- Dialups
 - breaking connections, (G) *User*, 2-26
 - login failures, (G) *User*, 2-12
- DIBOL, (G) *SW Overview*, 4-6; (P) *Environment*, 7-2, 7-6
 - starting the message manager, (S) *Sys Mgr Essentials*, 5-16
- DIFFERENCES command, (G) *DCL A-M*, DCLI-151 to DCLI-160
 - in network operations, (S) *DECnet Intro*, 2-8
 - output formats, (G) *DCL A-M*, DCLI-156
- Differential signaling
 - for SCSI, (G) *V6.2 New Feat*, 7-7
- DIGITAL Command Language
 - See DCL
- Digital consulting, (S) *Dependable*, 10-1 to 10-10
- Digital Distributed Name Service
 - See DECdns
- Digital Ethernet Communications Server
 - See DECSA
- DIGITAL Extended LAN Management Software
 - See DECelms
- Digital Extended Math Library for OpenVMS, (G) *SW Overview*, 4-10
- Digital home page, (G) *Compatibility*, 3-8
- Digital Learning Services Internet Catalog, (G) *Compatibility*, 3-8
- Digital Network Architecture
 - See DNA
- Digital private escape sequence, (P) *I/O User*, B-9
- Digital publications
 - See Bibliography
- Digital Standard MUMPS
 - See DSM
- DIGITAL Standard Runoff
 - See DSR
- Digital Storage Architecture
 - See DSA
- Digital System Identifier
 - See DSI
- DINT key types, (P) *Rec Mgmt Util*, 4-30
- DIO (direct I/O), (S) *DECamds*, 3-17, 3-24
 - limit (DIOLM), (S) *DECamds*, 3-24
 - use display, (S) *DECamds*, 2-3
- DIOLM (direct I/O limit) quota, (P) *Concepts*, 9-3
- DIOLM process limit, (S) *Sys Mgr Essentials*, 6-42; (P) *I/O User*, 2-27
 - value for efficient backups, (S) *Sys Mgr Essentials*, 10-10
- DIR.COM command procedure, (G) *User*, C-9
 - sample execution, (G) *User*, C-11
- Direct access mode, (P) *File Appl*, 1-2
- Direct I/O, (S) *Alpha Perform*, 7-5, 11-5; (P) *Concepts*, 5-18
 - count, (P) *Rec Mgmt Util*, 2-17
 - count process limit, (S) *Sys Mgr Essentials*, 6-42
 - definition, (S) *Alpha Perform*, 14-1
 - map, (S) *VAX Perform*, 2-18
- Direct I/O count process limit, (P) *I/O User*, 2-27, 3-10
- Direct I/O usage
 - See DIO
- Directing ANALYZE/DISK_STRUCTURE output, (S) *Sys Mgmt Util A-L*, 3-6, 3-9
- Directing output, (S) *DECnet Mgmt Util*, 2-1
- Directing SYSGEN output, (S) *Sys Mgmt Util M-Z*, 5-4, 5-7, 5-16
- Directives
 - See also Message utility
 - .END, (P) *Concepts*, 13-59
 - .FACILITY, (P) *Concepts*, 13-58
 - .SEVERITY, (P) *Concepts*, 13-59
 - .TITLE, (P) *Concepts*, 13-60
- Direct mode
 - as execution mode for a startup procedure, (S) *Sys Mgr Essentials*, 5-19
- Directories, (P) *File Appl*, 6-11
 - See also Subdirectories
 - access, (G) *User*, 5-8
 - access control through ACLs, (S) *Security*, 4-19
 - accessing when public, (S) *DECnet Intro*, 2-5
 - access requirements, (S) *Security*, 5-8, 5-9
 - access to files created in, (S) *Sys Mgmt Util A-L*, 1-9
 - and Default Protection ACEs, (S) *Sys Mgmt Util A-L*, 1-11
 - assigning a Creator ACE to, (S) *Sys Mgmt Util A-L*, 1-9
 - assigning a security profile, (S) *Security*, 5-11
 - backing up, (S) *Sys Mgr Essentials*, 10-24
 - backlink, (S) *Sys Mgr Essentials*, 8-56
 - changing specification, (G) *DCL N-Z*, DCLII-37
 - controlling access to files, (S) *Security*, 4-20, 8-16
 - copying, (G) *DCL A-M*, DCLI-80
 - copying with BACKUP, (S) *Sys Mgr Essentials*, 10-23
 - creating, (G) *DCL A-M*, DCLI-91; (S) *Security*, 5-9; (S) *Sys Mgr Essentials*, 9-20
 - creating for a new account, (S) *Sys Mgmt Util A-L*, 5-19
 - DECnet default nonprivileged, (S) *DECnet Intro*, 3-11
 - definition, (G) *User*, 5-1
 - deleting, (G) *User*, 5-4
 - destination

Directories

- destination (cont'd)
 - specifying in VMSINSTAL.COM command procedure, (S) *Sys Mgr Essentials*, 3-13
 - determining access to files created in, (S) *Sys Mgmt Util A-L*, 1-11
 - displaying contents of, (G) *User*, 5-3; (G) *DCL A-M*, DCLI-161
 - displaying default, (G) *DCL N-Z*, DCLII-259
 - displaying remote, (S) *DECnet Intro*, 2-5
 - events audited, (S) *Security*, 5-11
 - file version limit
 - defining at creation, (G) *DCL A-M*, DCLI-92
 - for an interactive account, (S) *Sys Mgr Essentials*, 6-15
 - listing remote, (S) *TCP/IP*, 3-4
 - modifying, (G) *DCL N-Z*, DCLII-124
 - modifying number in system space
 - for Files-11 volume, (G) *DCL N-Z*, DCLII-235
 - OpenVMS, (G) *SW Overview*, 5-9
 - ownership
 - by resource identifier, (S) *Security*, 8-21
 - changing access to files, (S) *Security*, 8-16; (S) *Sys Mgmt Util A-L*, 1-9
 - setting default, (S) *Security*, 8-16
 - protecting, (S) *Sys Mgr Essentials*, 9-12
 - protection, (S) *Sys Mgr Essentials*, 9-11
 - defining at creation, (G) *DCL A-M*, DCLI-92
 - modifying, (G) *DCL N-Z*, DCLII-190
 - ready access, (G) *DCL A-M*, DCLI-249
 - resetting default in SYSMAN, (S) *Sys Mgr Essentials*, 2-17
 - restoring, (S) *Sys Mgr Essentials*, 10-29
 - setting default, (G) *DCL N-Z*, DCLII-119
 - setting default file protection, (S) *Security*, 4-19
 - setting file protection, (S) *Security*, 8-16
 - shelved files, (G) *DCL A-M*, DCLI-169
 - space preallocation on disk, (G) *DCL A-M*, DCLI-251
 - temporary working
 - in VMSINSTAL.COM command procedure, (S) *Sys Mgr Essentials*, 3-14
 - transactions involving remote, (S) *TCP/IP*, 5-8
 - user, (G) *SW Overview*, 5-9
- ## Directory backlinks
- definition, (S) *Sys Mgmt Util A-L*, 3-3
- ## DIRECTORY command
- (G) *User*, 5-3; (G) *DCL A-M*, DCLI-161 to DCLI-173; (S) *Sys Mgr Essentials*, 9-5
 - checking number of user's disk blocks, (S) *Sys Mgr Essentials*, 8-49
 - /FULL qualifier for checking RMS statistics status, (P) *File Appl*, 3-30

DIRECTORY command (cont'd)

- in CLUE, (S) *Sys Mgmt Util A-L*, 8-6
 - in Mail, (G) *User*, 6-4, 6-13
 - in network operations, (S) *DECnet Intro*, 2-5
 - retrieving file information, (S) *Sys Mgr Essentials*, 9-2
 - /SECURITY qualifier, (S) *Security*, 5-13
 - showing full information, (S) *Sys Mgr Essentials*, 9-17
 - to obtain product list, (S) *Sys Mgr Essentials*, 3-10
 - with tapes, (S) *Sys Mgr Essentials*, 9-16, 9-20
- ## Directory default
- displaying, (S) *Sys Mgmt Util M-Z*, 6-58
 - modifying, (S) *Sys Mgmt Util M-Z*, 6-54
- ## Directory entry
- creation, (P) *I/O User*, 1-25
 - protection, (P) *I/O User*, 1-9
- ## Directory field
- definition, (G) *User*, 4-2
 - using an asterisk (*) wildcard character in, (G) *User*, 4-9
 - using a percent sign (%) wildcard character in, (G) *User*, 4-10
- ## Directory files
- creating, (G) *User*, 5-3
 - default, (G) *User*, 5-5
 - format, (G) *User*, 5-3
 - protection, (G) *User*, 5-7
 - setting default to another, (G) *User*, 5-5
 - top-level, (G) *User*, 5-1
- ## DIRECTORY/FULL command for checking RMS statistics status
- (P) *File Appl*, 3-30
- ## Directory logical name tables
- process, (P) *Concepts*, 10-3
 - system, (P) *Concepts*, 10-3
- ## Directory lookup subfunction
- (P) *I/O User*, 1-7
- ## directory entry protection
- (P) *I/O User*, 1-9
- ## Directory names
- format in file specifications, (G) *User*, 5-3
 - replacing
 - with ellipsis (...) wildcard character, (G) *User*, 5-8
 - with hyphen (-) wildcard character, (G) *User*, 5-9
 - translating UIC format to named format, (G) *User*, 5-10
- ## Directory specifications
- definition, (G) *User*, 5-3
 - format, (G) *User*, 5-3
 - normal, (P) *File Appl*, 6-11 to 6-13
 - rooted, (P) *File Appl*, 6-13 to 6-18
 - rules for entering, (G) *User*, 5-3
- ## Directory structures
- on common system disk, (S) *VMScluster Sys*, 5-4
 - sample, (G) *User*, 5-1

- Directory trees, (P) *File Appl*, 6-11
 - copying, (S) *Sys Mgr Essentials*, 10-23
 - propagating UIC-based protection, (S) *Sys Mgmt Util A-L*, 1-11
 - restoring, (S) *Sys Mgmt Util A-L*, 7-9
- DIRECTORY_ENTRY attribute, (P) *Rec Mgmt Util*, 4-19; (P) *File Appl*, 4-32
- DIR/FTP command, (S) *Sys Mgr Tuning*, 21-14; (S) *TCP/IP*, 3-4, 5-8
- DISABLE AST command, (P) *Debugger*, 13-16
- DISABLE AUTOSTART command, (G) *DCL A-M*, DCLI-174 to DCLI-175
- DISABLE AUTOSTART/QUEUES command, (S) *Sys Mgr Essentials*, 13-54, 13-55
- DISABLE command
 - in SYSGEN, (S) *Sys Mgmt Util M-Z*, 5-12
- Disabled queues, (S) *Sys Mgr Essentials*, 13-84
- Disabling
 - network event logging, (S) *DECnet Intro*, 4-6
- Disabling asynchronous delivery
 - of alerts, (P) *DECthreads*, cma-3
 - of cancels, (P) *DECthreads*, pthread-66
- Disabling autostart, (S) *Sys Mgr Essentials*, 12-9, 13-54
 - before shutting down a node, (S) *Sys Mgr Essentials*, 13-55
 - on a node, (G) *DCL A-M*, DCLI-174; (G) *DCL N-Z*, DCLII-400
- Disabling error checking, (G) *User*, 15-33
- Disabling logins, (S) *VMScluster Sys*, 4-7
- Disabling operator terminals, (S) *Sys Mgr Essentials*, 2-24
- Disabling spooling, (S) *Sys Mgr Essentials*, 7-15
- Disabling user accounts, (S) *Sys Mgr Essentials*, 6-27
- Disaster tolerant computing, (G) *SW Overview*, 2-12, 7-10; (S) *Dependable*, 1-2 to 1-3, 5-11
- DISCONNECT command, (G) *DCL A-M*, DCLI-176 to DCLI-177; (S) *DECnet Mgmt Util*, 4-8; (P) *I/O User*, 5-18
 - multiprocess program, (P) *Debugger*, 14-9
- Disconnected job messages, (S) *Security*, 3-6
- Disconnected processes
 - See Virtual terminals
- Disconnect features
 - enabling, (P) *I/O User*, 8-12
- Disconnecting a logical link, (S) *DECnet Mgmt*, 8-14
 - abort, (S) *DECnet Mgmt*, 8-14, 8-30
 - synchronous, (S) *DECnet Mgmt*, 8-14
- Disconnection tests, (S) *DECnet Mgmt Util*, 4-8
 - types of, (S) *DECnet Mgmt Util*, 4-9
- DISCONNECT LINK command, (S) *DECnet Mgmt*, 3-56; (S) *DECnet Mgmt Util*, 3-40
- Disconnect service, (P) *RMS Ref*, RMS-24; (P) *File Appl*, 8-5
 - condition values, (P) *RMS Ref*, RMS-25
 - See also Completion status codes
 - control block input fields, (P) *RMS Ref*, RMS-25
 - control block output fields, (P) *RMS Ref*, RMS-25
 - program example, (P) *RMS Ref*, A-23
 - using with multiple RABs, (P) *RMS Ref*, RMS-25
- .DIS file type
 - with distribution lists, (G) *User*, 6-8
- Disk
 - activity
 - due to paging or swapping, (S) *Alpha Perform*, 14-4
 - average response time, (S) *Alpha Perform*, 11-3
 - direct access, (S) *Alpha Perform*, 11-5
 - error messages, (S) *DECcmds*, 3-6, 3-8
 - fragmentation
 - correcting, (S) *Alpha Perform*, 11-8
 - effect on system performance, (S) *Alpha Perform*, 11-8
 - MSCP served, (S) *Alpha Perform*, 11-5
 - remote access, (S) *Alpha Perform*, 11-5
 - thrashing
 - investigating, (S) *Alpha Perform*, 13-12
 - transfer
 - components, (S) *Alpha Perform*, 11-1
- Disk activity
 - due to paging or swapping, (S) *VAX Perform*, 4-29
- Disk class drivers, (S) *VMScluster Sys*, 1-4, 2-17
 - audio extensions, (P) *I/O User*, 2-18
 - disabling the loading of, (P) *I/O User*, 8-9
 - \$QIO interface to audio functions, (P) *I/O User*, 2-19
- DISK class record
 - in Monitor utility, (S) *Sys Mgmt Util M-Z*, A-14
- Disk cluster boundary
 - determining allocation quantity, (P) *RMS Ref*, 4-3
- Disk controllers, (S) *VMScluster Sys*, 1-3
- Disk drives
 - compatibility for volume shadowing, (P) *I/O User*, 7-2
- Disk file sections, (P) *Sys Svc I*, SYS1-156
- Disk I/O resource, (S) *Alpha Perform*, 11-1 to 11-3
 - disk capacity and demand, (S) *VAX Perform*, 3-30
 - data transfer capacity, (S) *VAX Perform*, 3-30
 - demand by users and the system, (S) *VAX Perform*, 3-31

Disk I/O resource

- disk capacity and demand (cont'd)
 - seek capacity, (S) *VAX Perform*, 3-30
 - equitable sharing, (S) *VAX Perform*, 3-34; (S) *Alpha Perform*, 11-5
 - evaluating responsiveness, (S) *VAX Perform*, 3-31
 - factors limiting performance, (S) *VAX Perform*, 3-31
 - function, (S) *VAX Perform*, 3-29
 - improving responsiveness, (S) *VAX Perform*, 3-33; (S) *Alpha Perform*, 11-5
 - load balancing, (S) *VAX Perform*, 3-41; (S) *Alpha Perform*, 11-10
 - offloading, (S) *VAX Perform*, 3-37; (S) *Alpha Perform*, 11-9
 - RAM disks, (S) *VAX Perform*, 3-39; (S) *Alpha Perform*, 18-4
 - virtual I/O cache, (S) *VAX Perform*, 3-37; (S) *Alpha Perform*, 18-1
 - reducing consumption, (S) *VAX Perform*, 3-34; (S) *Alpha Perform*, 11-6
 - solid-state disks, (S) *VAX Perform*, 3-33
- Disk model, (P) *Rec Mgmt Util*, 4-36
- DISKQUOTA (Disk Quota utility)
- See Disk Quota utility
- DISKQUOTA commands, (S) *Sys Mgmt Util M-Z*, 6-21 to 6-29
- DISKQUOTA commands in SYSMAN, (S) *Sys Mgr Essentials*, 2-11, 8-52
- Disk quotas, (G) *Compatibility*, 1-4; (S) *Sys Mgr Essentials*, 6-15; (P) *I/O User*, 1-35 to 1-36, 2-27
- as restriction for users, (S) *Security*, 7-3
 - charging to identifiers, (S) *Security*, 8-10
 - creating, (S) *Sys Mgr Essentials*, 8-51; (S) *Sys Mgmt Util M-Z*, 6-22
 - definition, (S) *Sys Mgr Essentials*, 8-48
 - disabling, (S) *Sys Mgr Essentials*, 8-53; (S) *Sys Mgmt Util M-Z*, 6-23
 - displaying, (G) *DCL N-Z*, DCLII-331; (S) *Sys Mgr Essentials*, 8-49; (S) *Sys Mgmt Util M-Z*, 6-29
 - ensuring accuracy with rebuild operation, (S) *Sys Mgr Essentials*, 8-50
 - example, (S) *Sys Mgr Essentials*, 6-33
 - file, (S) *Sys Mgr Essentials*, 8-49
 - adding entry, (S) *Sys Mgmt Util M-Z*, 6-21
 - initializing usage count, (S) *Sys Mgmt Util M-Z*, 6-21
 - maintaining, (S) *Sys Mgr Essentials*, 8-50
 - modifying an entry, (S) *Sys Mgmt Util M-Z*, 6-25
 - rebuilding, (S) *Sys Mgmt Util M-Z*, 6-26
 - removing an entry, (S) *Sys Mgmt Util M-Z*, 6-23, 6-27
 - retrieving information, (S) *Sys Mgr Essentials*, 8-52

Disk quotas (cont'd)

- suspending operations, (S) *Sys Mgr Essentials*, 8-52

Disk Quota utility (DISKQUOTA), (S) *Sys Mgr Essentials*, 8-50

Disks

- See also CD-ROM, DSA disks, and System disks
- accessible across the VMScluster, (S) *VMScluster Sys*, 1-3
- accessing deleted data, (S) *Security*, 5-13
- access to SCSI storage, (G) *V6.2 New Feat*, 7-2
- ACP operation
 - control function, (P) *I/O User*, 1-34
 - creating file, (P) *I/O User*, 1-24
 - deaccessing file, (P) *I/O User*, 1-27
- allocating drives, (S) *Sys Mgr Essentials*, 8-9
- allocating mapping pointers, (G) *DCL A-M*, DCLI-256
- allocating space on, (S) *Sys Mgr Essentials*, 8-52
- allocation class, (S) *VMScluster Sys*, 6-7
- altering label, (S) *VMScluster Sys*, 8-40
- audio functions
 - See SCSI, class driver
- available function, (P) *I/O User*, 2-35
- backing up active, (S) *Sys Mgr Essentials*, 10-63
- Backup utility, (P) *I/O User*, 2-16
- basic concepts, (P) *File Appl*, 1-3
- block
 - definition, (S) *Sys Mgr Essentials*, 8-2
 - grouped into cluster, (S) *Sys Mgr Tuning*, A-1
- changing message transfer rate, (S) *Security*, 9-28
- cluster, (S) *Sys Mgr Tuning*, A-1
 - definition, (S) *Sys Mgr Essentials*, 8-2
- cluster-accessible, (S) *VMScluster Sys*, 6-1
 - storing common procedures on, (S) *VMScluster Sys*, 5-8
- clusterwide access to local, (S) *VMScluster Sys*, 6-15
- concepts, (S) *Sys Mgr Tuning*, A-1
- configuring, (S) *VMScluster Sys*, 6-20
- configuring system, (S) *VMScluster Sys*, 9-14
- creating sequential files, (G) *DCL A-M*, DCLI-88
- cylinder
 - definition, (S) *Sys Mgr Tuning*, A-2
- data check, (P) *I/O User*, 2-12, 2-32, 2-33
- deallocating drives, (G) *User*, 12-3; (S) *Sys Mgr Essentials*, 8-10
- default format, (S) *Sys Mgr Essentials*, 9-19
- default security elements, (S) *Security*, 5-6
- defining shareable volume, (G) *DCL A-M*, DCLI-255

Disks (cont'd)

- defining structure level, (G) *DCL A-M*, DCLI-256
- definition, (S) *Sys Mgr Essentials*, 8-2
- defragmenting, (G) *SW Overview*, 7-6
- device characteristics, (P) *I/O User*, 2-25
- device descriptions, (P) *I/O User*, 2-3 to 2-7
- directory space allocation, (G) *DCL A-M*, DCLI-251
- directory structure on common system disk, (S) *VMScluster Sys*, 5-4
- disabling operator status, (G) *DCL N-Z*, DCLII-43
- dismounting, (G) *DCL A-M*, DCLI-178; (S) *Sys Mgr Essentials*, 10-16
- dismounting volume set, (G) *DCL A-M*, DCLI-180
- displaying quota, (G) *DCL N-Z*, DCLII-331
- driver, (P) *I/O User*, 2-1, 2-18
 - SCSI, (P) *I/O User*, 2-17
 - VAXstation 2000 and MicroVAX 2000, (P) *I/O User*, 2-17
- DSA local device naming, (S) *Comparison*, 2-23
- dual-pathed, (S) *VMScluster Sys*, 5-9, 6-3; (P) *I/O User*, 2-8
 - DSA disks, (P) *I/O User*, 2-11
- dual-pathed, served by MSCP, (S) *VMScluster Sys*, 6-1
- dual-pathed HSC, (S) *VMScluster Sys*, 6-12
- dual-ported, (S) *VMScluster Sys*, 6-2; (P) *I/O User*, 2-9
- dual porting, (P) *I/O User*, 2-9
 - restrictions for use, (P) *I/O User*, 2-10
- dual-porting
 - DSA disks, (P) *I/O User*, 2-11
 - HSC disks, (P) *I/O User*, 2-11
- enabling operator status, (G) *DCL N-Z*, DCLII-43
- erase-on-allocate, (S) *Security*, 5-12, 5-13
- erasing, (S) *Security*, 5-13, 8-28
- erasure patterns, (S) *Security*, 5-12
- error recovery, (P) *I/O User*, 2-13
- establishing operational status for, (G) *DCL N-Z*, DCLII-121
- extents, (S) *Sys Mgr Tuning*, A-1
 - definition, (S) *Sys Mgr Essentials*, 8-2
- features, (P) *I/O User*, 2-8
- file attributes, (P) *I/O User*, 2-12
- file identification, (S) *Sys Mgr Tuning*, A-4
- Files-11
 - directory hierarchy, (S) *Sys Mgr Tuning*, A-4
- fragmentation of, (S) *Sys Mgr Essentials*, 10-48; (S) *Sys Mgr Tuning*, 15-27
 - correcting, (S) *VAX Perform*, 3-36
 - effect on system performance, (S) *VAX Perform*, 3-36

Disks (cont'd)

- function codes, (P) *I/O User*, 2-27, 2-28, A-2
- function modifiers
 - IO\$M_DATACHECK, (P) *I/O User*, 2-12, 2-33
 - IO\$M_INHRETRY, (P) *I/O User*, 2-13
- highwater marking, (S) *Security*, 5-12
- HSC controllers, (P) *I/O User*, 2-2
- I/O functions, (P) *I/O User*, 2-27, 2-32 to 2-38
 - See also ACP-QIO interface
 - arguments, (P) *I/O User*, 2-29 to 2-32
- I/O performance, (S) *Sys Mgr Tuning*, 16-8
- I/O status block, (P) *I/O User*, 2-38
- index file placement, (G) *DCL A-M*, DCLI-253
- indicating bad block data, (G) *DCL A-M*, DCLI-256
- initializing, (S) *Sys Mgr Essentials*, 10-14
- initializing from within a program, (P) *Sys Svc II*, SYS2-113
 - example, (P) *Concepts*, 9-36
- initializing within program, (P) *Concepts*, 9-36
- KDA50 controller, (P) *I/O User*, 2-2
- KDB50 controller, (P) *I/O User*, 2-2
- KFQSA adapter, (P) *I/O User*, 2-3
- making a group available
 - volume, (S) *Sys Mgmt Util M-Z*, 2-21
- making a public volume, (S) *Sys Mgmt Util M-Z*, 2-36
- managing security profiles, (S) *Security*, 5-6
- modifying RMS defaults for file operations, (G) *DCL N-Z*, DCLII-209
- mounting, (G) *User*, 12-7; (S) *Sys Mgr Essentials*, 8-28, 10-15; (S) *Sys Mgmt Util M-Z*, 2-4
 - clusterwide, (S) *Sys Mgmt Util M-Z*, 2-4, 2-14
 - for volume shadowing, (S) *Sys Mgmt Util M-Z*, 2-16, 2-17, 2-34
- mounting in host-based shadow set, (S) *Sys Mgr Essentials*, 10-42
- offset recovery, (P) *I/O User*, 2-12
- organization
 - logical, (S) *Sys Mgr Tuning*, A-1
 - physical, (S) *Sys Mgr Tuning*, A-2
- pack acknowledge function, (P) *I/O User*, 2-35
- port access mode, (P) *I/O User*, 2-9
- port selection, (P) *I/O User*, 2-9
- programming example, (P) *I/O User*, 2-39
- protecting, (S) *Sys Mgr Essentials*, 8-14, 8-16
- protecting after file deletion, (S) *Security*, 5-12
- quorum, (S) *VMScluster Sys*, 2-8
- RCT (replacement and caching table), (P) *I/O User*, 2-16
- read function, (P) *I/O User*, 2-32
- rebuilding, (S) *VMScluster Sys*, 6-20
- renaming directory, (G) *DCL N-Z*, DCLII-37
- renaming file, (G) *DCL N-Z*, DCLII-37
- restricted access, (S) *VMScluster Sys*, 6-1

Disks (cont'd)

RF31

failover, (P) *I/O User*, 2-12

RF70

failover, (P) *I/O User*, 2-12

SCSI, (G) *V6.2 New Feat*, 7-1

SCSI concepts, (G) *V6.2 New Feat*, 7-5

SCSI configuration requirements, (G) *V6.2 New Feat*, 7-3

SCSI storage interconnect, (G) *V6.2 New Feat*, 3-6

SDI (Standard Disk Interface), (P) *I/O User*, 2-3

search function, (P) *I/O User*, 2-34

sector translation, (P) *I/O User*, 2-14

seek operations, (P) *I/O User*, 2-13, 2-35

selecting server, (S) *VMScluster Sys*, 8-4

sense mode function, (P) *I/O User*, 2-34

set density function, (P) *I/O User*, 2-34

set preferred path function, (P) *I/O User*, 2-36

setting allocation class, (S) *VMScluster Sys*, 6-9

shareable volume

specifying, (S) *Sys Mgmt Util M-Z*, 2-35

shared, (S) *VMScluster Sys*, 6-19

SII integral adapter, (P) *I/O User*, 2-3

skip sectoring, (P) *I/O User*, 2-14

specifying cluster size, (G) *DCL A-M*, DCLI-250

specifying default file extension size, (G) *DCL A-M*, DCLI-251

specifying density, (G) *DCL A-M*, DCLI-250

specifying faulty areas, (G) *DCL A-M*, DCLI-249

specifying maximum file number, (G) *DCL A-M*, DCLI-253

specifying size for DECram disk, (G) *DCL A-M*, DCLI-255

status returns, (P) *I/O User*, A-3

supported devices, (P) *I/O User*, 2-1 to 2-8

SYS\$GETDVI returns, (P) *I/O User*, 2-25

terminology, (S) *Sys Mgr Essentials*, 8-2

track

definition, (S) *Sys Mgr Tuning*, A-2

TU58 magnetic tape

data checks, (P) *I/O User*, 2-12

read function, (P) *I/O User*, 2-32

search function, (P) *I/O User*, 2-34

write check function, (P) *I/O User*, 2-36

write function, (P) *I/O User*, 2-33

UDA50 disk adapter, (P) *I/O User*, 2-1

unload function, (P) *I/O User*, 2-35

usage, (S) *Sys Mgr Essentials*, 8-49

accounting file, (S) *Sys Mgmt Util A-L*, E-1

creating file, (S) *Sys Mgr Essentials*, 8-58

UICs kept in quota file, (S) *Sys Mgr Tuning*, A-9

Disks (cont'd)

use with Verify utility, (P) *I/O User*, 2-15, 2-17

VAXstation 2000 and MicroVAX 2000 driver, (P) *I/O User*, 2-17

volume protection, (S) *Security*, 5-20

volumes and volume sets

definitions, (S) *Sys Mgr Essentials*, 8-2

write check function, (P) *I/O User*, 2-35

write function, (P) *I/O User*, 2-33

Disk scavenging

discouraging, (S) *Security*, 8-27

preventing, (S) *Security*, 5-12

Disk servers, (G) *SW Overview*, 6-17

configuring LAN adapter, (S) *VMScluster Sys*, 9-5

configuring memory, (S) *VMScluster Sys*, 9-5

functions, (S) *VMScluster Sys*, 3-6

MSCP on LAN configurations, (S) *VMScluster Sys*, 3-6

selecting, (S) *VMScluster Sys*, 8-4

VMScluster, (P) *Environment*, 3-3

Disk space

allocation by cluster, (S) *Sys Mgr Tuning*, A-1

charging to identifier, (S) *Security*, 8-21

managing, (S) *Sys Mgr Essentials*, 8-48 to 8-55

purging files, (S) *Sys Mgr Essentials*, 8-53

requirements for security audit log file, (S) *Security*, 9-28

saving, (S) *Sys Mgr Essentials*, 8-53

by moving page and swap files off the

system disk, (S) *Sys Mgr Tuning*, 15-5

by purging the operator log file, (S) *Sys Mgr Essentials*, 5-14

by removing optional system files, (S) *Sys Mgr Essentials*, 5-1

by storing minimal dump information, (S) *Sys Mgr Tuning*, 15-10

by using a selective dump, (S) *Sys Mgr Tuning*, 15-3, 15-4

tracking use of, (S) *Sys Mgr Tuning*, 19-6

usage and charging, (S) *Security*, 8-10

Disk space required for installation, (S)

DECamds, A-3

Disk Status Summary window, (S) *DECamds*, 3-5 to 3-6

Disk storage server, (S) *Sys Mgr Tuning*, 23-10

Disk striping, (G) *SW Overview*, 2-15, 7-8

dependability features, (S) *Dependable*, 8-26

Disk Striping Driver for OpenVMS, (G) *SW Overview*, 2-15, 7-6, 7-8

Disk structure

analyzing errors, (S) *Sys Mgr Essentials*, 8-55

Files-11, (S) *Sys Mgr Tuning*, A-3; (P) *File Appl*, 1-6

reporting and repairing errors, (S) *Sys Mgr Essentials*, 8-56

- DSDRIVER, (S) *VMScluster Sys*, 1-4, 2-17
 - load balancing, (S) *VMScluster Sys*, 6-17
- DSE (data security erase)
 - magnetic tape, (P) *I/O User*, 3-22
 - tailoring, (S) *Security*, 8-28
- DSF32 device, (S) *DECnet Mgmt*, 2-7
- DSF files
 - See Debug symbol files
- /DSF qualifier, (P) *Linker*, LINK-12
- DSH32 device, (S) *DECnet Mgmt*, 2-7
- DSI (Digital System Identifier)
 - ISO 9660 media protection, (S) *Sys Mgr Essentials*, 8-18
 - mount option, (S) *Sys Mgr Essentials*, 8-17
- DSI keyword
 - with MOUNT/PROTECTION command, (S) *Sys Mgr Essentials*, 8-23
- DSM, (G) *SW Overview*, 7-14
- DSR (DIGITAL Standard Runoff), (G) *DCL N-Z*, DCLII-65; (G) *SW Overview*, 5-12
 - Refer also to the *OpenVMS DIGITAL Standard Runoff Reference Manual*
- commands
 - for flag recognition, (G) *User*, 10-20
 - summary, (G) *User*, 10-11 to 10-22
- creating a file, (G) *User*, 10-2
- creating an index, (G) *User*, 10-8
 - defaults, (G) *User*, 10-8
 - qualifiers, (G) *User*, 10-9
 - tailoring, (G) *User*, 10-9
- creating a table of contents, (G) *User*, 10-5
 - defaults, (G) *User*, 10-5
 - qualifiers, (G) *User*, 10-6
 - tailoring, (G) *User*, 10-6, 10-7
- description, (G) *User*, 10-1
- disabling defaults, (G) *User*, 10-5
- formatting
 - appendix, (G) *User*, 10-17
 - chapter, (G) *User*, 10-17
 - emphasizing text, (G) *User*, 10-15
 - figures, (G) *User*, 10-16
 - filling text, (G) *User*, 10-13
 - footnotes, (G) *User*, 10-17
 - horizontal spacing, (G) *User*, 10-14
 - index, (G) *User*, 10-19
 - justifying text, (G) *User*, 10-13
 - lists, (G) *User*, 10-16
 - margins, (G) *User*, 10-13
 - notes, (G) *User*, 10-17
 - page size, (G) *User*, 10-11
 - paging, (G) *User*, 10-12 to 10-13
 - paragraphs, (G) *User*, 10-15
 - running heads, (G) *User*, 10-11
 - section, (G) *User*, 10-18
 - table of contents, (G) *User*, 10-19
 - vertical spacing, (G) *User*, 10-14
- formatting a file, (G) *User*, 10-2
- DSR (DIGITAL Standard Runoff) (cont'd)
 - invoking, (G) *DCL N-Z*, DCLII-65
 - processing a file, (G) *User*, 10-2
 - RUNOFF command, (G) *User*, 10-2
 - overriding, (G) *User*, 10-3
 - qualifiers, (G) *User*, 10-3
 - text file formatting, (G) *DCL N-Z*, DCLII-65
 - using defaults, (G) *User*, 10-4
- DSSI (DIGITAL Storage Systems Interconnect), (G) *SW Overview*, 1-6
 - changing allocation class values on DSSI subsystems, (S) *VMScluster Sys*, 6-10, 8-40
 - changing to a mixed-interconnect, (S) *VMScluster Sys*, 8-23
 - configurations, (S) *VMScluster Sys*, 3-3, 3-5
 - configuring multiple adapters, (S) *VMScluster Sys*, 3-5
 - ISE peripherals, (S) *VMScluster Sys*, 3-3
 - MSCP server accesses shadow sets, (S) *VMScluster Sys*, 6-24
- DSSI hardware configurations, (S) *Dependable*, 6-13
- DST32 device, (S) *DECnet Mgmt*, 2-7
- DSTRING key type, (P) *Rec Mgmt Util*, 4-30
- DSTs (debug symbol tables)
 - creating, (P) *Debugger*, 9-4
 - shareable image, (P) *Debugger*, 9-13
 - source line correlation, (P) *Debugger*, 10-1
- DSV11 device, (S) *DECnet Mgmt*, 2-7
- DTE (data terminal equipment)
 - database parameters
 - See also Displaying network parameters
 - states and transitions, (S) *DECnet Mgmt Util*, C-5
 - state transitions, (S) *DECnet Mgmt Util*, C-6
- DTIF converters, (G) *DCL A-M*, DCLI-67, DCLI-68
- DTRECV (DECnet Test Receiver image), (S) *DECnet Mgmt Util*, 4-1
- DTR utility
 - See DECnet Test Sender/DECnet Test Receiver utility
- DTS (Distributed Time Service), (G) *SW Overview*, 6-14
- DTS/DTR utility
 - See DECnet Test Sender/DECnet Test Receiver utility (DTS/DTR)
- DTSEND (DECnet Test Sender image), (S) *DECnet Mgmt Util*, 4-1
- DTSEND command, (S) *DECnet Mgmt Util*, 4-2
- Dual-architecture VMSclusters
 - installing images, (S) *Sys Mgmt Util M-Z*, 6-30
 - example, (S) *Sys Mgmt Util M-Z*, 6-31

- Dual-architecture VMScluster systems, (G) *SW Overview*, 1-7
 - installing images, (S) *Sys Mgr Tuning*, 20-20
- Dual host
 - definition, (P) *I/O User*, 2-3
- Dual path
 - definition, (P) *I/O User*, 2-8
- Dual-pathed disks, (S) *VMScluster Sys*, 6-3; (P) *I/O User*, 2-8
 - DSA disk, (P) *I/O User*, 2-11
 - HSC, (S) *VMScluster Sys*, 6-12
 - served by MSCP, (S) *VMScluster Sys*, 6-1
 - setting up, (S) *VMScluster Sys*, 5-9
- Dual-pathed tapes, (S) *VMScluster Sys*, 6-14
 - served by TMSCP, (S) *VMScluster Sys*, 6-1
- Dual-ported disks, (S) *VMScluster Sys*, 6-2; (P) *I/O User*, 2-9
 - DSA disk, (P) *I/O User*, 2-11
 - HSC disk, (P) *I/O User*, 2-11
 - restrictions for use, (P) *I/O User*, 2-10
- Dual-ported tapes, (S) *VMScluster Sys*, 6-2
- Dual values for system parameters
 - on Alpha systems, (S) *Comparison*, 5-3
- DUDRIVER, (S) *VMScluster Sys*, 1-4, 2-17
 - load balancing, (S) *VMScluster Sys*, 6-17
- Dump
 - hexadecimal, (P) *Rec Mgmt Util*, 1-18
- Dump assistance multicast address, (S) *DECnet Mgmt*, 4-13
- DUMPSBUG system parameter, (S) *Sys Mgr Tuning*, 15-3; (P) *Alpha SDA*, SDA-2, SDA-28; (P) *VAX SDA*, SDA-4, SDA-32
- DUMP command, (G) *DCL A-M*, DCLI-182 to DCLI-190; (P) *File Appl*, 10-11
 - in LMCP, (S) *Sys Mgmt Util A-L*, 14-8
- DUMPFIL AUTOGEN symbol, (S) *VMScluster Sys*, 10-13
- Dump file information
 - saving automatically, (S) *Sys Mgr Tuning*, 15-11
- Dump file off system disk, (G) *V6.2 New Feat*, 3-23; (S) *Sys Mgr Tuning*, 15-14
- Dump files
 - See also System dump files
 - changing size, (S) *Sys Mgmt Util A-L*, 6-3
 - displaying the size calculated by AUTOGEN, (S) *Sys Mgmt Util A-L*, 6-7
 - generating a new file sized by AUTOGEN, (S) *Sys Mgmt Util A-L*, 6-7
- DUMPFIL symbol, (S) *Sys Mgr Tuning*, 15-24
- Dump formats, (G) *DCL A-M*, DCLI-183 to DCLI-187
- Dumping
 - of files, (G) *DCL A-M*, DCLI-182
 - of volumes, (G) *DCL A-M*, DCLI-182
 - unattended system memory, (S) *DECnet Mgmt*, 4-11
 - upline, (S) *DECnet Intro*, 2-16
- DUMP/RECORDS command
 - in network operations, (S) *DECnet Intro*, 2-9
- DUMPSTYLE AUTOGEN symbol, (S) *VMScluster Sys*, 10-13
- DUMPSTYLE parameter, (P) *Alpha SDA*, SDA-3
- DUMPSTYLE system parameter, (G) *V6.2 New Feat*, 3-15; (S) *Sys Mgr Tuning*, 15-3, 15-7, 15-10; (P) *VAX SDA*, SDA-6
 - controlling size of system dump files, (S) *Comparison*, 3-8
- DUMP subset, (P) *Alpha SDA*, SDA-3; (P) *VAX SDA*, SDA-6
- Duplex mode, (S) *DECnet Mgmt*, 3-42, 3-43
 - See also Half-duplex mode
 - terminal, (P) *I/O User*, 5-10
- Duplicate computing facilities, (S) *Dependable*, 5-11
- Duplicate keys, (P) *Rec Mgmt Util*, 4-26
 - examples, (P) *RMS Ref*, 6-9
 - incompatibility between RMS and RMS-11, (P) *RMS Ref*, 12-9
 - insertion order, (P) *RMS Ref*, RMS-76
 - null key processing, (P) *File Appl*, 3-22
 - retrieving records, (P) *RMS Ref*, 6-8
 - secondary retrieval order, (P) *Rec Mgmt Util*, 2-2
 - values, (P) *Rec Mgmt Util*, 4-5
- Duplicate labels
 - command interpreter rules for, (G) *DCL A-M*, DCLI-52, DCLI-227, DCLI-229
- DUPLICATES attribute, (P) *Rec Mgmt Util*, 4-26
- Duplicate system disks
 - creating, (S) *VMScluster Sys*, 8-31
- DUPLICATES_PER_SIDR attribute, (P) *Rec Mgmt Util*, 4-5
- Duration tests, (S) *DECnet Mgmt Util*, 4-7, 4-12
- DVNETEND PAK
 - DECnet end-node license, (G) *Compatibility*, 2-6
- DVNETEXT PAK
 - DECnet for OpenVMS Alpha extended license, (G) *Compatibility*, 2-7
- DVNETRTG PAK
 - DECnet for OpenVMS VAX routing license, (G) *Compatibility*, 2-7
- DX header, (S) *VMScluster Sys*, F-22
- DX protocol
 - DX header, (S) *VMScluster Sys*, F-22
 - part of NISCA transport protocol, (S) *VMScluster Sys*, F-3
- Dynamic asynchronous circuits, (S) *DECnet Mgmt*, 2-8
- Dynamic asynchronous connections, (S) *DECnet Mgmt*, 1-3
 - automatic switching of terminal line, (S) *Security*, 12-17; (S) *DECnet Intro*, 3-27
 - connection example, (S) *Security*, 12-19; (S) *DECnet Intro*, 3-29

Dynamic asynchronous connections (cont'd)

- manual switching of terminal line, (S) *Security*, 12-17; (S) *DECnet Intro*, 3-27
- network configuration, (S) *DECnet Mgmt*, 5-29
- password, (S) *DECnet Mgmt*, 2-29
- passwords for, (S) *Security*, 12-16
- procedure for establishing, (S) *Security*, 12-15; (S) *DECnet Intro*, 3-24
- reasons for failure, (S) *DECnet Intro*, 4-16; (S) *DECnet Mgmt*, 5-18
- receive password, (S) *DECnet Intro*, 3-25
- security, (S) *Security*, 12-16; (S) *DECnet Intro*, 3-25
- switching of terminal line, (S) *Security*, 12-15; (S) *DECnet Intro*, 3-24
- terminating the link, (S) *Security*, 12-18; (S) *DECnet Intro*, 3-28
- transmit password, (S) *DECnet Intro*, 3-25
- verifier, (S) *Security*, 12-14
- Dynamic asynchronous lines, (S) *DECnet Mgmt*, 1-9, 2-14, 5-12
 - installing, (S) *DECnet Mgmt*, 5-14
 - shutting down, (S) *DECnet Mgmt*, 5-19
- Dynamic attribute, (P) *Concepts*, 23-5
 - for identifiers, (S) *Security*, 8-8
- Dynamic attributes, (S) *Sys Mgmt Util A-L*, 5-21, 5-29, 5-37
- Dynamic length strings, (P) *STR\$*, 2-1, 2-2, 2-3, STR-64
 - allocation of, (P) *STR\$*, STR-43
 - deallocation of, (P) *STR\$*, STR-42
- Dynamic load balancing, (S) *Sys Mgr Tuning*, 26-2
 - See MSCP dynamic load balancing
- Dynamic mode
 - image setting, (P) *Debugger*, 9-13
 - module setting, (P) *Debugger*, 9-6
- Dynamic parameters
 - modifying, (S) *Sys Mgmt Util M-Z*, 5-33, 6-51
- Dynamic process setting, (P) *Debugger*, 14-8
- Dynamic prompt setting, (P) *Debugger*, 14-2
- Dynamic service rating, (S) *Sys Mgmt Util A-L*, 13-15, 13-40
 - displaying, (S) *Sys Mgmt Util A-L*, 13-51, 13-58
- Dynamic string descriptor, (P) *Calling Std*, 5-4
- Dynamic strings, (P) *OTS\$*, OTS-92
- Dynamic switching
 - manual switching of line, (S) *DECnet Mgmt*, 5-17
 - procedure for line, (S) *DECnet Mgmt*, 2-14
 - setting up lines, (S) *DECnet Mgmt*, 5-15
- Dynamic system parameters, (S) *Sys Mgr Tuning*, 14-2, 14-3
- DYNSWITCH image, (S) *DECnet Intro*, 3-25; (S) *DECnet Mgmt*, 5-17
 - installing, (S) *DECnet Mgmt*, 5-15

- DZ11 device, (S) *DECnet Mgmt*, 1-9; (P) *I/O User*, 5-1
- DZ32 device, (P) *I/O User*, 5-1
- DZRO_MIN= option, (P) *Linker*, LINK-50
 - controlling demand-zero compression, (P) *Linker*, 3-25
- DZV11 device, (P) *I/O User*, 5-1
- D_float floating-point data type, (G) *Compatibility*, 1-12

E

- EBCDIC character set
 - ASCII translation from, (P) *LIB\$*, LIB-308, LIB-497
 - ASCII translation to, (P) *LIB\$*, LIB-306, LIB-493
- Echo
 - terminal, (P) *Concepts*, 7-39
 - terminators, (P) *Concepts*, 7-24
- /ECHO qualifier, (P) *VAX SDA*, SDA-49
- Echo tests, (S) *DECnet Mgmt Util*, 4-7, 4-12
- EDF logical name
 - restricted use, (P) *Rec Mgmt Util*, 6-3
- Edit/FDL utility (EDIT/FDL), (P) *Environment*, 10-19; (P) *Rec Mgmt Util*, 4-37, 6-1, 6-3; (P) *File Appl*, 1-37
- ADD command, (P) *Rec Mgmt Util*, 6-13
 - as alternative to multiple XABs, (P) *RMS Ref*, A-20
- calculating bucket size, (P) *File Appl*, 3-16, 3-26
- calculating extension size, (P) *File Appl*, 9-7
- commands, (P) *File Appl*, 4-3
- contiguous files, (P) *File Appl*, 3-4
- creating areas for index structures, (P) *File Appl*, 3-24
- creating FDL files, (P) *Rec Mgmt Util*, 5-1; (P) *File Appl*, 4-2, 4-5
- default value, (P) *File Appl*, 4-11
- DELETE command, (P) *Rec Mgmt Util*, 6-14
- EXIT command, (P) *Rec Mgmt Util*, 6-14
- HELP command, (P) *Rec Mgmt Util*, 6-15
- INVOKE command, (P) *Rec Mgmt Util*, 6-15
- invoking a script, (P) *File Appl*, 4-4
- optimization algorithms, (P) *File Appl*, A-1
- Optimize script, (P) *Rec Mgmt Util*, 6-1; (P) *File Appl*, 10-22
- prompt, (P) *File Appl*, 4-10
- QUIT command, (P) *Rec Mgmt Util*, 6-17
- scripts, (P) *Rec Mgmt Util*, 6-15
- SET command, (P) *Rec Mgmt Util*, 6-17
- specifying output file name, (P) *Rec Mgmt Util*, 6-8
- specifying run-time options, (P) *File Appl*, 9-1 to 9-5
- VIEW command, (P) *Rec Mgmt Util*, 6-18

- EDIT/ACL command, (G) *DCL A-M*, DCLI-191;
(P) *File Appl*, 4-27
- EDITALL.COM command procedure, (G) *User*,
C-15
 - sample execution, (G) *User*, C-17
- EDIT command, (G) *User*, 9-2; (P) *Environment*,
9-5; (P) *Debugger*, 5-4
 - /EDT qualifier
 - /READ_ONLY qualifier, (G) *User*, 4-14
 - for remote file, (S) *DECnet Intro*, 2-7
 - in network operations, (S) *DECnet Intro*, 2-7
 - /TPU qualifier
 - /READ_ONLY qualifier, (G) *User*, 4-14
- EDIT/EDT command, (G) *DCL A-M*, DCLI-192 to
DCLI-195
- EDIT/FDL command, (G) *DCL A-M*, DCLI-196
 - /ANALYSIS qualifier, (P) *Rec Mgmt Util*, 6-4
 - /CREATE qualifier, (P) *Rec Mgmt Util*, 6-4
 - /DISPLAY qualifier, (P) *Rec Mgmt Util*, 6-5
 - /EMPHASIS qualifier, (P) *Rec Mgmt Util*, 6-5
 - /GRANULARITY qualifier, (P) *Rec Mgmt Util*,
6-6
 - /NOINTERACTIVE qualifier, (P) *Rec Mgmt
Util*, 6-7
 - /NUMBER_KEYS qualifier, (P) *Rec Mgmt Util*,
6-8
 - /OUTPUT qualifier, (P) *Rec Mgmt Util*, 6-8
 - /PROMPTING qualifier, (P) *Rec Mgmt Util*,
6-9
 - /RESPONSES qualifier, (P) *Rec Mgmt Util*, 6-9
 - /SCRIPT qualifier, (P) *Rec Mgmt Util*, 6-10
- Editing ACLs, (S) *Security*, 4-21 to 4-23
 - See also ACL editor
- Editing command lines, (G) *User*, 3-16
 - deleting characters, (G) *User*, 3-17
 - enabling line editing, (G) *User*, 3-16
 - insert mode, (G) *User*, 3-16
 - overstrike mode, (G) *User*, 3-16
- Editing files
 - using EDT, (G) *User*, 9-1
- Editing sessions
 - keypad for ACL editing, (S) *Sys Mgmt Util
A-L*, A-1
- EDIT keypad function, (S) *Sys Mgr Tuning*, 20-7;
(S) *Sys Mgmt Util M-Z*, 4-33, B-3
- Editors
 - See also ACL editor, EDIT command, EDT
editor, EVE, FDL editor, SUMSLP editor,
and TECO editor
 - text file, (G) *SW Overview*, 5-12
- EDIT/SUM command, (G) *DCL A-M*, DCLI-197
- EDIT/TECO command, (G) *DCL A-M*, DCLI-198
to DCLI-200
- EDIT/TPU command, (G) *DCL A-M*, DCLI-201
to invoke EVE, (G) *User*, 8-4
- EDT\$EDIT routine, (P) *Util Routines*, EDT-3
- EDT editor, (G) *DCL A-M*, DCLI-192; (G) *SW
Overview*, 4-4, 5-12
 - Refer also to the *OpenVMS EDT Reference
Manual*
 - buffer definition, (G) *User*, 9-2
 - canceling commands, (G) *User*, 9-5
 - changing case of text
 - summary of commands and keys, (G) *User*,
9-16
 - changing modes, (G) *User*, 9-2, 9-7, 9-8
 - summary of commands and keys, (G) *User*,
9-9
 - commands
 - summary of processing commands and
keys, (G) *User*, 9-19
 - creating files, (G) *User*, 4-11, 9-2
 - defining keys
 - summary of commands and keys, (G) *User*,
9-17
 - definition, (G) *User*, 9-1
 - deleting text
 - summary of commands and keys, (G) *User*,
9-12
 - displaying files with, (G) *User*, 9-3
 - editing existing files, (G) *User*, 9-2
 - help
 - keypad editing, (G) *User*, 9-6
 - line mode, (G) *User*, 9-6
 - nokeypad mode, (G) *User*, 9-7
 - indenting text
 - summary of commands and keys, (G) *User*,
9-15
 - inserting text
 - summary of commands and keys, (G) *User*,
9-11
 - invoking, (G) *User*, 9-2
 - journal files, (G) *User*, 9-9
 - keypad commands, (G) *User*, 9-5
 - keypad editing, (G) *User*, 9-1, 9-5
 - help, (G) *User*, 9-6
 - keypad mode, (G) *User*, 9-7, 9-8
 - entering line-editing commands, (G) *User*,
9-8
 - line editing, (G) *User*, 9-1
 - line-editing commands, (G) *User*, 9-3
 - line mode, (G) *User*, 9-7, 9-8
 - help, (G) *User*, 9-6
 - locating text
 - summary of commands and keys, (G) *User*,
9-13
 - modifying files, (G) *User*, 4-11
 - moving text
 - summary of commands and keys, (G) *User*,
9-15
 - moving the cursor
 - summary of commands and keys, (G) *User*,
9-10

- EDT editor (cont'd)
 - multiple buffers
 - summary of commands and keys, (G) *User*, 9-17
 - nokeypad editing, (G) *User*, 9-2
 - nokeypad mode
 - help, (G) *User*, 9-7
 - recovering from Ctrl/Y, (G) *User*, 9-9
 - restoring text
 - summary of commands and keys, (G) *User*, 9-12
 - restoring the display, (G) *User*, 9-9
 - saving edits, (G) *User*, 9-7
 - screen settings
 - summary of commands and keys, (G) *User*, 9-18
 - specifying a range, (G) *User*, 9-3
 - substituting text
 - summary of commands and keys, (G) *User*, 9-14
 - summaries of commands and keys, (G) *User*, 9-9 to 9-21
 - terminal settings
 - summary of commands and keys, (G) *User*, 9-18
 - terminating a session, (G) *User*, 9-7
 - using line numbers, (G) *User*, 9-3
- EDT routines, (P) *Util Routines*, EDT-1
 - examples, (P) *Util Routines*, EDT-1, EDT-2
 - user-written
 - FILEIO, (P) *Util Routines*, EDT-7
 - WORKIO, (P) *Util Routines*, EDT-11
 - XLATE, (P) *Util Routines*, EDT-13
- ef_cluster_name data type, (P) *Interfaces*, B-6
- ef_number data type, (P) *Interfaces*, B-6
- Elapsed time, (P) *Rec Mgmt Util*, 2-17
- Electrical power, (S) *Dependable*, 5-1
- Electronic conferencing
 - See Notes
- Electronic mail
 - See Mail utility
- Eliminating single points of failure, (S) *Dependable*, 6-1
- Ellipsis (...)
- wildcard character in directory names, (G) *User*, 5-8, 5-9
- ELSE keyword
 - and IF command, (G) *DCL A-M*, DCLI-245
- Emergency system shutdown
 - with console commands, (S) *Sys Mgr Essentials*, 4-27
- Emergency system startup
 - with default system parameters, (S) *Sys Mgr Essentials*, 4-8
 - without startup and login procedures, (S) *Sys Mgr Essentials*, 4-8
 - without the UAF, (S) *Sys Mgr Essentials*, 4-10
- Emulator products, (S) *DECnet Intro*, 1-6
- ENABLE AST command, (P) *Debugger*, 13-16
- Enable attention AST function
 - LAN drivers, (P) *I/O User*, 9-42
- ENABLE AUTOSTART command, (G) *DCL A-M*, DCLI-202 to DCLI-204
- ENABLE AUTOSTART/QUEUES command, (S) *Sys Mgr Essentials*, 13-18, 13-48
 - in startup command procedure, (S) *Sys Mgr Essentials*, 13-16
 - recommended use, (S) *Sys Mgr Essentials*, 13-18
- ENABLE command
 - in SYSGEN, (S) *Sys Mgmt Util M-Z*, 5-13
- Enabling asynchronous delivery of alerts, (P) *DECthreads*, cma-6
- Enabling asynchronous delivery of cancels, (P) *DECthreads*, pthread-66
- Enabling autostart, (S) *Sys Mgr Essentials*, 13-4, 13-18, 13-48
 - in startup command procedure, (S) *Sys Mgr Essentials*, 13-16
- Enabling autostart on a node, (G) *DCL A-M*, DCLI-202
- Encryption, (G) *SW Overview*, 2-15, 3-14, 6-7; (S) *Security*, 8-27
- End Communications layer events, (S) *DECnet Mgmt Util*, D-4
- .END directive, (P) *Concepts*, 13-59
- /ENDING qualifier, (S) *Sys Mgmt Util M-Z*, 4-7
- End nodes, (S) *DECnet Intro*, 1-2, 3-8, 3-12; (S) *DECnet Mgmt*, 1-1, 1-12
 - caching on Ethernet, (S) *DECnet Mgmt*, 2-20
 - configuration, (S) *DECnet Mgmt*, 2-18
 - DECnet for OpenVMS license kit, (S) *DECnet Mgmt*, 1-12, 6-1
 - definition, (S) *DECnet Mgmt*, 2-15
 - LAN, (S) *DECnet Mgmt*, 1-7, 2-19
 - network, (S) *Sys Mgr Tuning*, 21-6
 - non-LAN, (S) *DECnet Mgmt*, 1-7
 - on VMScluster, (S) *DECnet Mgmt*, 1-10
 - Phase IV, (S) *DECnet Mgmt*, 2-17
 - reverse path caching, (S) *DECnet Mgmt*, 2-20
- End of batch job on cards, (G) *DCL A-M*, DCLI-208
- End of data stream, (G) *DCL A-M*, DCLI-206
- End-of-file
 - See EOF
- End-of-module record analysis, (G) *DCL A-M*, DCLI-26
- End-of-module record format
 - Alpha object language, (P) *Linker*, B-42
 - VAX object language, (P) *Linker*, A-31
- End-of-tape markers
 - See EOT markers

- End-of-volume
 - See EOF
- END phase, (S) *Sys Mgmt Util M-Z*, 6-71
 - of system startup, (S) *Sys Mgr Essentials*, 5-19
- End phase of AUTOGEN
 - default, (S) *Sys Mgmt Util A-L*, 6-10
- Endpoints, (S) *TCP/IP*, 2-5
- ENDSUBROUTINE command, (G) *DCL A-M*, DCLI-53, DCLI-54, DCLI-205
- End-to-end verification, (S) *TCP/IP*, 2-4
- END_OF_FILE attribute, (P) *Rec Mgmt Util*, 4-9
- ENQLM process limit, (S) *Sys Mgr Essentials*, 6-42
- Enqueue, (P) *DECthreads*, 2-18
- Entering NCP commands, (S) *DECnet Mgmt Util*, 1-2
- Enter service, (P) *RMS Ref*, RMS-30
 - condition values, (P) *RMS Ref*, RMS-32
 - control block input fields, (P) *RMS Ref*, RMS-31
 - control block output fields, (P) *RMS Ref*, RMS-31
 - requirement for NAM block fields, (P) *RMS Ref*, RMS-31
- Entry code sequences, (P) *Calling Std*, 3-45
 - example for register frame procedures, (P) *Calling Std*, 3-46
 - example for stack frame procedures, (P) *Calling Std*, 3-46
- Entry masks, (P) *Interfaces*, B-14
- Entry point name, (P) *MTH\$*, 1-1
- Entry points
 - CALL entry points, (P) *Interfaces*, 3-4, 4-3; (P) *STR\$*, 2-8
 - JSB entry points, (P) *Interfaces*, 3-6; (P) *STR\$*, 2-8
 - RTL names, (P) *Interfaces*, 3-3
- Environment
 - defining
 - in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-53
- Environmental factors of dependable computing, (S) *Dependable*, 1-15 to 1-16, 3-2 to 3-3, 5-5 to 5-8, 5-11
 - multiple-site data center VMScluster system, (S) *Dependable*, 6-17, 7-12
- Environmental identifiers, (S) *Security*, 8-4
 - example, (G) *User*, 19-3; (S) *Security*, 4-3, 4-5, 4-19
- Environments
 - ALL-IN-1, (G) *SW Overview*, 5-2, 5-8
 - client/server, (G) *SW Overview*, 2-7, 6-17; (P) *Environment*, 3-2
 - common code, (G) *SW Overview*, 4-2
 - common language, (G) *SW Overview*, 4-2; (P) *Environment*, 7-1
 - common programming, (G) *SW Overview*, 4-1
 - computing, (G) *SW Overview*, 2-1
 - DECwindows Motif user, (G) *SW Overview*, 5-5
 - Environments (cont'd)
 - development, (P) *Environment*, 1-5
 - distributed, (G) *SW Overview*, 2-6, 6-1, 6-2; (P) *Environment*, 1-3
 - hyperinformation, (G) *SW Overview*, 4-17
 - multivendor, (G) *SW Overview*, 2-5, 6-2
 - open system, (G) *SW Overview*, 2-1
 - OpenVMS, (G) *SW Overview*, 5-2, 6-1
 - PATHWORKS, (G) *SW Overview*, 6-18
 - POSIX, (G) *SW Overview*, 5-2
 - production systems, (G) *SW Overview*, 2-1, 7-1
 - security, (G) *SW Overview*, 3-14
 - software development, (G) *SW Overview*, 6-14
 - standalone, (G) *SW Overview*, 6-1
 - VMScluster, (G) *SW Overview*, 1-7
 - Environment task
 - definition of, (P) *Debugger*, 16-7
 - Environment value, (P) *Calling Std*, 3-44
 - EOD command, (G) *DCL A-M*, DCLI-206, DCLI-207
 - and DECK command, (G) *DCL A-M*, DCLI-112
 - EOF (end-of-file), (P) *Concepts*, 7-5
 - status
 - magnetic tape, (P) *I/O User*, 3-14
 - write mailbox message, (P) *I/O User*, 4-11
 - EOF condition, (G) *DCL A-M*, DCLI-206
 - EOF indicator, (G) *DCL A-M*, DCLI-112
 - EOF label, (P) *File Appl*, 1-20, 1-32
 - EOF mark
 - positioning for user file open option, (P) *RMS Ref*, 4-16
 - EOF option, (P) *Rec Mgmt Util*, 4-10
 - See also RAB\$V_EOF option
 - EOF positioning, (P) *RMS Ref*, RMS-7
 - EOJ command, (G) *DCL A-M*, DCLI-208
 - EOT markers, (S) *Sys Mgr Essentials*, 8-6; (P) *File Appl*, 1-19
 - continuing to copy after, (S) *Sys Mgr Essentials*, 9-24
 - status
 - magnetic tape, (P) *I/O User*, 3-14, 3-15, 3-17
- EOV (end-of-volume)
 - detection on magnetic tape, (P) *I/O User*, 3-17
 - label, (P) *File Appl*, 1-20, 1-32
- Equal cost path splitting, (S) *DECnet Mgmt*, 2-22, 3-53
- Equal-or-next key option
 - See also RAB\$V_EQNXT option
- Equal-or-next-key option, (P) *File Appl*, 8-8, 8-9
- Equitable sharing
 - of CPU resource, (S) *VAX Perform*, 3-13; (S) *Alpha Perform*, 9-6
 - of disk I/O resource, (S) *VAX Perform*, 3-34; (S) *Alpha Perform*, 11-5
 - of memory resource, (S) *Alpha Perform*, 10-7

Equivalence names

- assigning to logical names, (G) *DCL A-M*, DCLI-40, DCLI-115
- defining, (P) *Concepts*, 10-2
- displaying for logical names, (G) *DCL N-Z*, DCLII-348
- format convention, (P) *Concepts*, 10-13
- specifying, (P) *Sys Svc I*, SYS1-120
- specifying access control string in, (S) *DECnet Intro*, 2-4

Equivalence strings, (G) *User*, 13-1; (P) *File Appl*, 6-4

- defining multiple logical names for, (G) *User*, 13-7

Erase-on-allocate, (S) *Security*, 5-12, 5-13

Erase-on-delete, (S) *Security*, 5-12, 8-28

- C2 systems and, (S) *Security*, C-9

Erase service, (P) *RMS Ref*, RMS-33 to RMS-35; (P) *File Appl*, 5-9

condition values

- See also Completion status codes

Erasing blocks, (S) *Sys Mgr Essentials*, 8-58; (S) *Sys Mgmt Util A-L*, 3-5

Erasing disks, (S) *Security*, 8-28

Erasing home blocks, (S) *Sys Mgmt Util A-L*, 3-8

Erasure operations, (P) *SMG\$*, 2-7

Erasure patterns, (S) *Security*, 5-12, 8-28

erfc routine, (P) *Portable Math*, DPML-30, B-7

erf routine, (P) *Portable Math*, DPML-30, B-6

ERLBUFFPAGES system parameter, (S) *Sys Mgr Tuning*, 15-6

ERRFMT

- See Error Formatter

ERRFMT process, (S) *Sys Mgr Tuning*, 18-2

- creation during system startup, (S) *Sys Mgr Essentials*, 5-5

- restarting, (S) *Sys Mgr Tuning*, 18-3

- sending mail when it is deleted, (S) *Sys Mgr Tuning*, 18-4

- writes to ERRLOG.SYS file, (S) *Sys Mgr Tuning*, 18-2

Error checking, (P) *Interfaces*, 4-9; (P) *File Appl*, 10-1

- in FOLR routines, (P) *MTH\$*, 2-6

- in SYSTARTUP_VMS.COM, (S) *Sys Mgr Essentials*, 5-10

- in system parameter files, (S) *Sys Mgr Tuning*, 14-19

Error completion routine, (P) *RMS Ref*, 2-4

Error correction strategies, (S) *Dependable*, 1-10 to 1-12, 1-16

Error Formatter

- changing mail username, (S) *Sys Mgr Tuning*, 18-5
- description, (S) *Sys Mgr Tuning*, 18-2
- disabling mail, (S) *Sys Mgr Tuning*, 18-4, 18-5
- enabling mail, (S) *Sys Mgr Tuning*, 18-5

Error Formatter (cont'd)

- notifying user with mail message, (S) *Sys Mgr Tuning*, 18-4

- using to send mail, (S) *Sys Mgr Tuning*, 18-4

Error handling

- See also Condition handling

- ANALYZE/RMS_FILE journaling errors, (P) *Rec Mgmt Util*, 1-7

- ANALYZE/RMS_FILE nonjournaling errors, (P) *Rec Mgmt Util*, 1-7

- SET NOON command, (G) *User*, 15-33

Error-handling requirements, (G) *V6.2 New Feat*, 8-10

ERROR LOG (Error Log utility)

- See Error Log utility

ERRORLOG.EXE file, (P) *VAX SDA*, SDA-64

ERRORLOG.STB file, (P) *Alpha SDA*, SDA-61

ERRORLOGBUFFERS system parameter, (S) *Sys Mgr Tuning*, 15-6; (P) *Alpha SDA*, SDA-4; (P) *VAX SDA*, SDA-5

Error log files, (S) *Alpha Perform*, 2-2

- created by ERRFMT process, (S) *Sys Mgr Tuning*, 18-2

- events reported in, (S) *Sys Mgr Tuning*, 18-5

- logical name defining location, (S) *Sys Mgr Essentials*, 5-8

- maintaining, (S) *Sys Mgr Tuning*, 18-3

- moving to reduce system disk I/O, (S) *Sys Mgr Tuning*, 16-8

- producing full report, (S) *Sys Mgr Tuning*, 18-6

- reporting on using DECEvent, (S) *Sys Mgr Tuning*, 18-8

- SYSPRV privilege to access, (S) *Sys Mgr Tuning*, 18-6

Error logger

- sending message to, (P) *Sys Svc II*, SYS2-304

Error logging

- description, (S) *Sys Mgr Tuning*, 18-2

- facility, (S) *Sys Mgr Tuning*, 18-2

- reports produced, (S) *Sys Mgr Tuning*, 18-3

- using the Error Log utility, (S) *Sys Mgr Tuning*, 18-2

Error logging routines

- global symbols, (P) *Alpha SDA*, SDA-61; (P) *VAX SDA*, SDA-64

Error log messages, (P) *Alpha SDA*, SDA-169

Error Log Report Formatter (ERF), (S) *Sys Mgr Tuning*, 18-2

Error Log utility (ERROR LOG), (G) *SW Overview*, 7-5

- ANALYZE/ERROR_LOG command, (S) *Sys Mgr Tuning*, 18-6

- buffered I/O count reporting, (S) *Sys Mgmt Util A-L*, 10-18

- definition, (S) *Sys Mgr Tuning*, 18-5

- device classes, (S) *Sys Mgmt Util A-L*, 10-8, 10-11

Error Log utility (ERROR LOG)

- device classes (cont'd)
 - including, (S) *Sys Mgmt Util A-L*, 10-11
- device name
 - excluding, (S) *Sys Mgmt Util A-L*, 10-8
 - including, (S) *Sys Mgmt Util A-L*, 10-12
- direct I/O count reporting, (S) *Sys Mgmt Util A-L*, 10-18
- directing output, (S) *Sys Mgmt Util A-L*, 10-4
- entry type
 - excluding, (S) *Sys Mgmt Util A-L*, 10-9
 - including, (S) *Sys Mgmt Util A-L*, 10-12
- error log file
 - input file, (S) *Sys Mgmt Util A-L*, 10-4
 - specifying output, (S) *Sys Mgmt Util A-L*, 10-15
- events reported, (S) *Sys Mgmt Util A-L*, 10-3
 - selecting date, (S) *Sys Mgmt Util A-L*, 10-6, 10-17
 - selecting time, (S) *Sys Mgmt Util A-L*, 10-6, 10-17
- examples, (S) *Sys Mgmt Util A-L*, 10-19 to 10-32
- execution time event reporting, (S) *Sys Mgmt Util A-L*, 10-18
- exiting from, (S) *Sys Mgmt Util A-L*, 10-4
- I/O events, (S) *Sys Mgmt Util A-L*, 10-18
- invoking, (S) *Sys Mgmt Util A-L*, 10-4; (S) *VMScluster Sys*, C-27
- messages
 - informational, (S) *Sys Mgmt Util A-L*, 10-14
- output
 - ASCII format, (S) *Sys Mgmt Util A-L*, 10-6
 - binary format, (S) *Sys Mgmt Util A-L*, 10-6
 - directing, (S) *Sys Mgmt Util A-L*, 10-6, 10-14, 10-15, 10-16
 - file specification, (S) *Sys Mgmt Util A-L*, 10-6, 10-15
- page faults reported, (S) *Sys Mgmt Util A-L*, 10-18
- qualifiers, (S) *Sys Mgmt Util A-L*, 10-5 to 10-18
- relationship to UETP, (S) *Sys Mgr Tuning*, 17-3, 17-17, 17-29
- report format
 - ASCII, (S) *Sys Mgmt Util A-L*, 10-6, 10-7
 - binary, (S) *Sys Mgmt Util A-L*, 10-6, 10-11, 10-16
 - brief, (S) *Sys Mgmt Util A-L*, 10-7
 - hexadecimal longword, (S) *Sys Mgmt Util A-L*, 10-16
 - register dump, (S) *Sys Mgmt Util A-L*, 10-16
 - rejected entries, (S) *Sys Mgmt Util A-L*, 10-16

Error Log utility (ERROR LOG)

- report format (cont'd)
 - run-time statistics, (S) *Sys Mgmt Util A-L*, 10-17, 10-18
 - reporting on error log file, (S) *Sys Mgr Tuning*, 18-5
 - report types, (S) *Sys Mgr Tuning*, 18-5
 - restrictions, (S) *Sys Mgmt Util A-L*, 10-4
- Error messages
 - See Messages
 - warning, (P) *Rec Mgmt Util*, 2-4
- Error options
 - for fatal BACKUP errors, (S) *Sys Mgr Essentials*, 10-64
- /ERROR qualifier, (P) *Debugger*, 11-20
- Error recovery, (P) *Concepts*, 9-11
 - disk, (P) *I/O User*, 2-13
 - magnetic tape, (P) *I/O User*, 3-6
 - shadow set virtual unit driver, (P) *I/O User*, 7-8
- Error reporting, (S) *DECnet Mgmt*, 8-31
 - system service status, (S) *DECnet Mgmt*, 8-31
- Error returns, (P) *Interfaces*, 2-22
- Errors
 - analyzing disk structure, (S) *Sys Mgr Essentials*, 8-55
 - analyzing error reports, (S) *Sys Mgr Tuning*, 18-2
 - analyzing media, (S) *Sys Mgr Essentials*, 8-64
 - avoiding, (S) *Dependable*, 8-29 to 8-30
 - CI port recovery, (S) *VMScluster Sys*, C-44
 - controlling error checking, (G) *DCL N-Z*, DCLII-175
 - detecting in command procedures, (G) *User*, 15-41
 - disk read
 - if returned when booting, (S) *Sys Mgr Essentials*, 4-16
 - disk structure
 - repairing, (S) *Sys Mgr Essentials*, 8-57
 - reporting, (S) *Sys Mgr Essentials*, 8-57
 - during login, (G) *User*, 2-3
 - error log file, (S) *Sys Mgr Tuning*, 18-2
 - error logging facility, (S) *Sys Mgr Tuning*, 18-2
 - fatal errors detected by data link, (S) *VMScluster Sys*, D-2, E-4
 - fatal errors detected by datalink, (S) *VMScluster Sys*, C-39
 - handling in command procedures, (G) *User*, 15-30
 - handling on disk volumes, (S) *Sys Mgr Essentials*, 8-55
 - label, (G) *User*, 15-30
 - machine check
 - if returned when booting, (S) *Sys Mgr Essentials*, 4-16
 - mounting disk, (S) *Sys Mgr Essentials*, 8-22

Errors (cont'd)

- recommended method for signaling, (P) *RMS Ref*, 2-6
 - recovering from CI port, (S) *VMScluster Sys*, C-29
 - recovery from, (S) *Dependable*, 8-21
 - repair, (S) *Sys Mgmt Util A-L*, 3-3, 3-7, 3-10, 3-11
 - reporting, (S) *Sys Mgmt Util A-L*, 3-3; (P) *DECthreads*, 3-9
 - for image files, (G) *DCL A-M*, DCLI-21
 - for object files, (G) *DCL A-M*, DCLI-25
 - system service status, (S) *DECnet Mgmt*, 8-19
 - retransmission, (S) *VMScluster Sys*, F-36
 - returned by SYS\$LAVC_DEFINE_NET_COMPONENT subroutine, (S) *VMScluster Sys*, E-6
 - returned by SYS\$LAVC_DEFINE_NET_PATH subroutine, (S) *VMScluster Sys*, E-9
 - returned by SYS\$LAVC_DISABLE_ANALYSIS subroutine, (S) *VMScluster Sys*, E-11
 - returned by SYS\$LAVC_ENABLE_ANALYSIS subroutine, (S) *VMScluster Sys*, E-10
 - returned by SYS\$LAVC_START_BUS subroutine, (S) *VMScluster Sys*, E-2
 - returned by SYS\$LAVC_STOP_BUS subroutine, (S) *VMScluster Sys*, E-5
 - returning condition value, (P) *Interfaces*, 2-22
 - signaling, (P) *Concepts*, 13-5
 - signaling condition value, (P) *Interfaces*, 2-22
 - stopping the LAN on all LAN adapters, (S) *VMScluster Sys*, C-39, E-5
 - when stopping the NISCA protocol, (S) *VMScluster Sys*, D-2
- ## ERRORS class
- adding, (S) *Sys Mgmt Util M-Z*, 4-18
 - fields belonging to, (S) *Sys Mgmt Util M-Z*, 4-23
 - removing, (S) *Sys Mgmt Util M-Z*, 4-44
- ## Errors during UETP, (S) *Sys Mgr Tuning*, 17-21
- diagnosing, (S) *Sys Mgr Tuning*, 17-16
 - sources of, (S) *Sys Mgr Tuning*, 17-17
- ## Error statistics
- displaying with NCP commands, (S) *DECnet Intro*, 4-3
- ## Error status code, (P) *RMS Ref*, 2-6
- from invalid control blocks, (P) *RMS Ref*, 2-6
- ## Error streams
- defining for created process, (G) *DCL N-Z*, DCLII-55
- ## Error termination of a thread, (P) *DECthreads*, cma-64
- ## ESA (expanded string area address)
- program example, (P) *RMS Ref*, A-23
- ## Escalation
- severity filter, (S) *DECamds*, 2-7
 - time filter, (S) *DECamds*, 2-7

Escape sequences

- ANSI, (P) *I/O User*, B-9
 - Digital-private, (P) *I/O User*, B-9
 - read, (P) *Concepts*, 9-31
 - terminal, (P) *I/O User*, 5-7, 5-21
 - using from terminal devices, (P) *RMS Ref*, RMS-51
- ## ESP symbol, (P) *Alpha SDA*, SDA-15; (P) *VAX SDA*, SDA-18
- ## ESS\$LASTDRIVER device driver, (S) *Sys Mgr Tuning*, 23-9, 23-13
- controlling and diagnosing, (S) *Sys Mgr Tuning*, 23-9, 23-10
- ## ESS\$STARTUP.COM command procedure, (S) *Sys Mgr Tuning*, 23-10, 23-13
- invoking in system startup, (S) *Sys Mgr Tuning*, 23-10
- ## Ethernet, (S) *DECnet Mgmt*, 1-4
- See also LANs
 - adapters
 - specifying number of in MODPARAMS.DAT file, (S) *Sys Mgr Tuning*, 14-21
 - broadcast address, (S) *DECnet Mgmt*, 1-6
 - cable, (S) *DECnet Intro*, 1-6, 1-7, 3-5; (S) *DECnet Mgmt*, 1-4
 - carrier sense, (S) *DECnet Mgmt*, 1-5
 - characteristics, (S) *DECnet Mgmt*, 1-4
 - circuit, (S) *DECnet Mgmt*, 1-4
 - circuit device, (S) *DECnet Mgmt*, 2-10
 - communications interconnects, (G) *SW Overview*, 1-8
 - configurations, (S) *VMScluster Sys*, 3-5, 3-15; (S) *DECnet Mgmt*, 1-4
 - configurator module, (S) *DECnet Intro*, 4-6; (S) *DECnet Mgmt*, 1-12, 1-17, 2-11, 3-34
 - configuring adapter, (S) *VMScluster Sys*, 9-5
 - connecting, (S) *Sys Mgr Tuning*, 21-7
 - datagrams, (S) *DECnet Mgmt*, 1-4
 - data rate, (S) *DECnet Mgmt*, 1-4
 - data transmission rate, (S) *DECnet Intro*, 1-7
 - defining a remote node for UETP, (S) *Sys Mgr Tuning*, 17-19
 - definition, (S) *Sys Mgr Tuning*, 21-5
 - device drivers, (S) *Sys Mgr Tuning*, 22-2; (P) *I/O User*, 9-2
 - devices, (S) *DECnet Intro*, 3-5, 3-34
 - error-log entry, (S) *VMScluster Sys*, C-33
 - hardware address, (S) *VMScluster Sys*, 8-5
 - hardware addresses, (S) *DECnet Mgmt*, 3-46
 - header for datagrams, (S) *VMScluster Sys*, F-21
 - implementation options, (S) *Dependable*, 7-8
 - in local area network, (S) *Sys Mgr Tuning*, 21-8
 - interconnect (IEEE 802.3), (S) *Dependable*, 6-11
 - LAN adapter, (G) *SW Overview*, 1-6
 - LAN technology, (G) *SW Overview*, 6-18

Ethernet (cont'd)

- line parameters, (S) *DECnet Mgmt*, 3-46
- line protocol, (S) *DECnet Mgmt*, 3-37
- linking with bridge, (S) *Sys Mgr Tuning*, 21-7
- maximum distances, (S) *Dependable*, 7-8
- monitoring activity, (S) *VMScluster Sys*, 10-25
- MSCP server accesses shadow sets, (S)

- VMScluster Sys*, 6-24

- multiaccess, (S) *DECnet Mgmt*, 1-4
- multicast address, (S) *DECnet Mgmt*, 1-6
- multiple adapters, (S) *VMScluster Sys*, 3-15
- network configuration, (S) *DECnet Mgmt*, 5-20
- networks, (G) *SW Overview*, 1-11
- node, (S) *DECnet Mgmt*, 1-4
- packets, (S) *DECnet Mgmt*, 1-5
- physical address, (S) *DECnet Mgmt*, 1-6
- port, (S) *VMScluster Sys*, C-19
- preparing for UETP, (S) *Sys Mgr Tuning*, 17-8
- protocol, (S) *DECnet Mgmt*, 1-4
- providing multiple paths to, (S) *Dependable*, 7-4
- service operations, (S) *DECnet Mgmt*, 3-29
- setting up LAN analyzer, (S) *VMScluster Sys*, F-30
- specification, (S) *DECnet Mgmt*, 1-4
- T-connector, (S) *DECnet Intro*, 3-5
- topology, (S) *DECnet Mgmt*, 1-4

Ethernet address

- See LAN addresses

Ethernet configurator

- network monitoring tool, (S) *Sys Mgr Tuning*, 21-17; (S) *DECnet Intro*, 4-1

Ethernet controllers

- See LAN controllers

Ethernet link

- See Data link

Ethernet monitor (NICONFIG), (G) *Compatibility*, 2-6

Ethernet Network Integrity Monitor

- See ETHERnim

ETHERnim

- introduction, (S) *Dependable*, 7-18
- use at CSC lights out data center, (S) *Dependable*, 11-16

ETO option, (P) *RMS Ref*, RMS-51

- See also RAB\$V_ETO option

Euclidean norm of a vector, (P) *MTH\$, MTH-170*

EVALUATE/ADDRESS command, (P) *Debugger*, 7-8, 7-14, 8-12

EVALUATE command, (P) *Debugger*, 8-5; (P) *Alpha SDA*, SDA-45; (P) *VAX SDA*, SDA-53

EVALUATE/PSL command, (P) *VAX SDA*, SDA-26

Evaluating

- %CURVAL built-in symbol, (P) *Debugger*, 8-5, B-6
- expression, (P) *Debugger*, 8-3, 8-5

Evaluating (cont'd)

- memory address, (P) *Debugger*, 8-12

- task, (P) *Debugger*, 16-13

EVE

- Refer also to the *Extensible Versatile Editor Reference Manual*

- as default editor, (G) *User*, 8-2

- Mail, (G) *User*, 6-18

attributes

- disabling prompting, (G) *User*, A-17

- saving, (G) *User*, A-10 to A-19, A-20, A-34, A-36, A-39

- a section file, (G) *User*, A-38 to A-39

- in a command file, (G) *User*, A-19, A-20, A-40

- setting, (G) *User*, A-10, A-13

box editing, (G) *User*, 8-23

- commands, (G) *User*, 8-24, 8-25

- cutting text, (G) *User*, 8-24

- effects of pending delete, (G) *User*, 8-26

- insert mode, (G) *User*, 8-26

- overstrike mode, (G) *User*, 8-26

- pasting text, (G) *User*, 8-24

- restoring text, (G) *User*, 8-26

- selecting text, (G) *User*, 8-23

- tutorial, (G) *User*, 8-25

buffer-change journaling, (G) *User*, 8-37

- commands, (G) *User*, 8-38

- definition, (G) *User*, 8-37

- disabling, (G) *User*, 8-37, 8-40

- enabling, (G) *User*, 8-41

- file names, (G) *User*, 8-38, 8-39

- files, (G) *User*, 8-38

- RECOVER BUFFER command, (G) *User*, 8-39

- recovering edits, (G) *User*, 8-39, 8-40

- /RECOVER qualifier, (G) *User*, 8-39

buffers, (G) *User*, 8-43

- BUFFER command, (G) *User*, 8-48

- changing status, (G) *User*, 8-46 to 8-47

- creating, (G) *User*, 8-44

- definition, (G) *User*, 8-43

- deleting, (G) *User*, 8-44, 8-46

- displaying information, (G) *User*, 8-45

- displaying messages, (G) *User*, 8-47

- editing two buffers, (G) *User*, 8-51

- GET FILE command, (G) *User*, 8-48

- manipulating, (G) *User*, 8-44

- multiple, (G) *User*, 8-47

- OPEN SELECTED command, (G) *User*, 8-48

- SET BUFFER command, (G) *User*, 8-46 to 8-47

- splitting windows, (G) *User*, 8-50

- viewing two sections, (G) *User*, 8-50

changing modes, (G) *User*, 8-14

character-cell terminals, (G) *User*, 8-2

command files, (G) *User*, A-26, A-34

EVE

- command files (cont'd)
 - adding functions to EVE, (G) *User*, A-27
 - converting to section files, (G) *User*, A-27
 - rules for writing, (G) *User*, A-28, A-29, A-30
 - setting default, (G) *User*, A-40
 - setting editing defaults, (G) *User*, A-27
 - startup, (G) *User*, A-41
- commands
 - DEFINE KEY, (G) *User*, A-3
 - EXIT, (G) *User*, 8-8
 - FIND, (G) *User*, 8-28
 - formatting, (G) *User*, 8-41
 - HELP, (G) *User*, 8-3
 - LEARN, (G) *User*, A-9
 - QUIT, (G) *User*, 8-8
 - REPLACE, (G) *User*, 8-31, 8-32
 - RESTORE BOX SELECTION, (G) *User*, 8-26
 - RESTORE SELECTION, (G) *User*, 8-26
 - SET FIND CASE EXACT, (G) *User*, 8-29, 8-32
 - SET PENDING DELETE, (G) *User*, 8-26
 - SPAWN, (G) *User*, 8-51, 8-52
 - text formatting, (G) *User*, 8-41
 - WRITE FILE, (G) *User*, 8-8
- copying text, (G) *User*, 8-22
 - tutorial, (G) *User*, 8-23
- creating a subprocess, (G) *User*, 8-51
- creating files, (G) *User*, 4-11
- default settings, (G) *User*, A-10
 - buffer-specific, (G) *User*, A-12
 - direction, (G) *User*, A-13
- defining keys, (G) *User*, A-2, A-3
 - abbreviations, (G) *User*, A-4
 - for EVE commands, (G) *User*, A-3
- definition, (G) *User*, 8-1
- editing keys, (G) *User*, 8-41
- EDIT/TPU command line qualifiers, (G) *User*, 8-33
 - for modifying buffers, (G) *User*, 8-35
 - for overriding /READ_ONLY or /NOWRITE, (G) *User*, 8-35
 - for start position, (G) *User*, 8-33 to 8-34
 - for work files, (G) *User*, 8-34 to 8-35
- EDT keypad emulation, (P) *Environment*, 5-2
- emulating EDT, (G) *User*, A-41
 - defining keys, (G) *User*, A-41, A-42
 - replacing EDT macros with DECTPU procedures, (G) *User*, A-43
 - replacing EDT nokeypad statements with DECTPU procedures, (G) *User*, A-44
 - setting case sensitivity, (G) *User*, A-43
 - setting cursor, (G) *User*, A-42
 - setting right margin, (G) *User*, A-42
 - setting scroll margins, (G) *User*, A-42

EVE

- emulating EDT (cont'd)
 - using SET KEYPAD EDT command, (G) *User*, A-41
 - using the WPS keypad ruler key, (G) *User*, A-44, A-45
- entering commands, (G) *User*, 8-5
 - with defined keys, (G) *User*, 8-6
- entering text, (G) *User*, 8-13
 - commands, (G) *User*, 8-14
 - editing keys, (G) *User*, 8-13
 - including files, (G) *User*, 8-13
 - insert mode, (G) *User*, 8-14
 - overstrike mode, (G) *User*, 8-14
 - special characters, (G) *User*, 8-13
 - tutorial, (G) *User*, 8-15
- erasing text, (G) *User*, 8-16
 - commands, (G) *User*, 8-17
 - editing keys, (G) *User*, 8-16
 - tutorial, (G) *User*, 8-18
 - with pending delete, (G) *User*, 8-26
- exiting, (G) *User*, 8-7, 8-8
- file backups, (G) *User*, 8-37
- help, (G) *User*, 8-3
 - accessing with keypad, (G) *User*, 8-3
 - HELP command, (G) *User*, 8-3
- initialization files, (G) *User*, A-14, A-32, A-34
 - assigning EVE commands, (G) *User*, A-3, A-4
 - commands that define the environment, (G) *User*, A-33
 - creating, (G) *User*, A-32, A-33
 - default, (G) *User*, A-33
 - defining the GOLD key, (G) *User*, A-9
 - specifying, (G) *User*, A-33
- insert mode, (G) *User*, 8-14
 - box editing, (G) *User*, 8-26
- invoking, (G) *User*, 8-4; (G) *DCL A-M*, DCLI-201
 - from search lists, (G) *User*, 8-35
 - with multiple input files, (G) *User*, 8-35, 8-37
 - with wildcard directory names, (G) *User*, 8-35, 8-36
 - with wildcards, (G) *User*, 8-35, 8-36
- key name conventions, (G) *User*, 8-1
- keys
 - defined
 - VT100 series terminals, (G) *User*, 8-7
 - VT200 series terminals, (G) *User*, 8-6
 - VT300 series terminals, (G) *User*, 8-6
 - VT400 series terminals, (G) *User*, 8-6
 - defining
 - control keys, (G) *User*, A-4
 - GOLD key, (G) *User*, A-8, A-9
 - differences between EVE and DECTPU, (G) *User*, A-5
 - GOLD key, (G) *User*, A-7

EVE

keys (cont'd)

- names and labels, (G) *User*, A-5
- removing GOLD key definitions, (G) *User*, A-9
- undefinable, (G) *User*, A-6

learn sequences, (G) *User*, A-2, A-9

- defining, (G) *User*, A-9
- tutorial, (G) *User*, A-10

locating text, (G) *User*, 8-27

- commands, (G) *User*, 8-27
- exact case, (G) *User*, 8-29
- marking locations, (G) *User*, 8-31
- search direction, (G) *User*, 8-28
- using wildcards, (G) *User*, 8-30
- with FIND command, (G) *User*, 8-28

Mail, (G) *User*, 6-17

modifying files, (G) *User*, 4-11

moving text, (G) *User*, 8-19

- commands, (G) *User*, 8-21
- editing keys, (G) *User*, 8-20
- tutorial, (G) *User*, 8-22

moving the cursor, (G) *User*, 8-8

- commands, (G) *User*, 8-10
- keys, (G) *User*, 8-9
- tutorial, (G) *User*, 8-12

overstrike mode, (G) *User*, 8-14

- box editing, (G) *User*, 8-26

quitting a session, (G) *User*, 8-8

reading batch job log files with, (G) *User*, 18-14

reading files, (G) *User*, 8-48

replacing text, (G) *User*, 8-31

restoring text, (G) *User*, 8-16

- after a pending delete operation, (G) *User*, 8-26

- box editing, (G) *User*, 8-26

- commands, (G) *User*, 8-17

- editing keys, (G) *User*, 8-18

- tutorial, (G) *User*, 8-18

saving edits, (G) *User*, 8-7

- with EXIT command, (G) *User*, 8-8

- with WRITE FILE command, (G) *User*, 8-8

section file, (G) *User*, A-10, A-13, A-17, A-18, A-25, A-26, A-34

- default, (G) *User*, A-26

- modifying, (G) *User*, A-25

- specifying, (G) *User*, A-18

- startup, (G) *User*, A-25

spawning a subprocess, (G) *User*, 8-51, 8-52

startup files, (G) *User*, A-1, A-34

summary of features, (G) *User*, 8-2

switching between EVE and DCL, (G) *User*, 8-51, 8-52

tailoring the standard editor, (G) *User*, A-2

using DECTPU, (G) *User*, A-20

- compiling procedures, (G) *User*, A-24

EVE

using DECTPU (cont'd)

- creating command files, (G) *User*, A-21
- debugging package, (G) *User*, A-21
- entering commands, (G) *User*, A-22
- entering statements, (G) *User*, A-22
- specifying debug file, (G) *User*, A-21
- writing command procedures, (G) *User*, A-22, A-23

windows, (G) *User*, 8-49

- commands, (G) *User*, 8-49

- keys, (G) *User*, 8-49

workstations, (G) *User*, 8-2

writing files, (G) *User*, 8-49

EVE (Extensible Versatile Editor), (G) *SW Overview*, 4-4, 5-12

EVE command files

- See Command files

EVE initialization files

- See Initialization files

Event class and type summary, (S) *DECnet Mgmt Util*, D-1 to D-13

Event classes

- See Security-auditing events

- displaying those being audited, (S) *Sys Mgr Tuning*, 18-27

- extracting audit records by, (S) *Sys Mgmt Util A-L*, 4-7

Event facility, (P) *Debugger*, 7-10, 16-28

Event flag clusters

- associating with a process, (P) *Sys Svc I*, SYS1-25

- deleting, (P) *Concepts*, 14-20; (P) *Sys Svc I*, SYS1-217

- disassociating, (P) *Sys Svc I*, SYS1-168

- dissociating, (P) *Concepts*, 14-20

- getting current status, (P) *Sys Svc II*, SYS2-201

- specifying name for, (P) *Concepts*, 14-19

Event flag numbers, (P) *Concepts*, 14-15

Event flag routines

- global symbols, (P) *VAX SDA*, SDA-64

Event flags, (G) *SW Overview*, 3-3, 4-11; (P) *Modular Proc*, 2-14; (P) *Concepts*, 14-14; (P) *Sys Svc I*, SYS1-219

- See also Synchronization

- allocation of, (P) *Concepts*, 6-17

- clearing, (P) *Concepts*, 14-23; (P) *Sys Svc I*, SYS1-109

- cluster, (P) *Concepts*, 14-15; (P) *Interfaces*, B-6

- common, (P) *Concepts*, 14-15

- for interprocess communication, (P) *Concepts*, 2-8

- for synchronous operations, (P) *RMS Ref*, 2-8

- getting current status, (P) *Sys Svc II*, SYS2-201

- local, (P) *Concepts*, 2-2, 14-15

Event flags (cont'd)

- number, (P) *Interfaces*, B-6
- reserve, (P) *LIB\$, LIB-361*
- RTL routine to free, (P) *LIB\$, LIB-187*
- setting, (P) *Concepts*, 14-23; (P) *Sys Svc II*, SYS2-244
- specifying, (P) *Concepts*, 14-15
- status, (P) *LIB\$, LIB-225*
- system services, (P) *Environment*, 10-5, 10-8
- wait, (P) *Concepts*, 14-22
- waiting for entire set of, (P) *Sys Svc II*, SYS2-423
- waiting for one of set, (P) *Sys Svc II*, SYS2-425
- waiting for setting of, (P) *Sys Svc II*, SYS2-420

Event flag service

- example using, (P) *Concepts*, 14-26

Event handling

- device driver used in, (S) *Sys Mgr Essentials*, 7-7

Event lists, (S) *DECnet Mgmt Util*, 1-9

Event logger

- See EVL

Event logging

- DECnet, (S) *DECnet Intro*, 4-1, 4-4
- disabling, (S) *DECnet Intro*, 4-6
- enabling, (S) *DECnet Intro*, 3-32
- example, (S) *DECnet Mgmt*, 3-65
- network, (S) *DECnet Intro*, 3-11

Event Log window, (S) *DECams*, 2-5, Glossary-2

Event notification

- pseudoterminal, (P) *I/O User*, 6-6

Eventpoints

- See Breakpoints, Tracepoints, and Watchpoints
- /EVENT qualifier, (P) *Debugger*, 7-10, 16-28, 16-30

Event records

- See Security audit reports

Events, (G) *SW Overview*, 3-2; (S) *DECams*, 2-5 to 2-9, Glossary-2

- See also Event Log window

- auditing, (P) *Sys Svc I*, SYS1-43, SYS1-61
- automatic collection, (S) *DECams*, Glossary-1
- automatic investigation, (S) *DECams*, 5-3
- breakpoint or tracepoint on, (P) *Debugger*, 7-10
- changing

- default highlighting, (S) *DECams*, 5-2
- severity filter, (S) *DECams*, 5-5, 5-8

- class, (S) *DECnet Intro*, 4-5; (S) *DECnet Mgmt*, 3-63

- creating thresholds for different computer classes, (S) *DECams*, 5-9

- customizing based on frequency of occurrence, (S) *DECams*, 5-9

- Data Link layer, (S) *DECnet Mgmt Util*, D-9
- definition, (S) *DECnet Mgmt*, 2-28

Events (cont'd)

- DNS (Distributed Name Service), (S) *DECnet Mgmt Util*, D-12

- End Communications layer, (S) *DECnet Mgmt Util*, D-4

- highlighting color, (S) *DECams*, 5-2

- identification of, (S) *DECnet Mgmt*, 3-63

- identifying location of, (S) *DECnet Mgmt*, 3-65

- identifying source for, (S) *DECnet Mgmt*, 3-64

- list, (S) *DECnet Mgmt*, 2-28

log

- file, (S) *DECams*, B-4

- window, (S) *DECams*, Glossary-2

- message format, (S) *DECnet Intro*, 4-6

- Network Management layer, (S) *DECnet Mgmt Util*, D-2

- OpenVMS specific, (S) *DECnet Mgmt Util*, D-12

- Routing layer, (S) *DECnet Mgmt Util*, D-4

- Session Control layer, (S) *DECnet Mgmt Util*, D-4

- sink-related, (S) *DECnet Mgmt*, 2-28

- source-related, (S) *DECnet Mgmt*, 2-28

- tasking (multithread) program, (P) *Debugger*, 16-28

- type, (S) *DECnet Intro*, 4-5; (S) *DECnet Mgmt*, 3-63

- X.25 Packet level, (S) *DECnet Mgmt Util*, D-11

Event synchronization, (P) *Environment*, 10-3

Event tolerance, and security levels, (S) *Security*, 1-2

- Event types, (S) *Sys Mgmt Util A-L*, 4-7

EVENT_FLAGS_AND_ASTS.EXE file

- global symbols, (P) *VAX SDA*, SDA-64

EVE section files

- See also Section files

- EVL (event logger), (S) *DECnet Mgmt*, 1-12, 2-25, 2-28

- Exact key match, (P) *File Appl*, 8-12

/EXACT_ORDER qualifier

- in Backup utility, (S) *Sys Mgmt Util A-L*, 7-27

EXACT_POSITIONING attribute, (P) *Rec Mgmt Util*, 4-7; (P) *File Appl*, 4-35

- Examine button, (P) *Debugger*, 1-8, 3-14

- EXAMINE command, (G) *DCL A-M*, DCLI-209 to DCLI-211; (P) *Debugger*, 8-2; (P) *Alpha SDA*, SDA-48; (P) *VAX SDA*, SDA-20, SDA-28, SDA-55

- and DEPOSIT command, (G) *DCL A-M*, DCLI-147

- length qualifier, (G) *DCL A-M*, DCLI-210

EXAMINE/INSTRUCTION command, (P)

- Debugger*, 8-19, 11-9; (P) *VAX SDA*, SDA-26

EXAMINE/OPERANDS command, (P) *Debugger*, 8-19, 15-9

EXAMINE/SOURCE command, (P) *Debugger*, 10-4, 11-6

Examining

address, (P) *Debugger*, 8-25

EXAMINE command, (P) *Debugger*, 8-2

instruction, (P) *Debugger*, 8-19, 15-9

register, (P) *Debugger*, 3-24, 8-22, 15-4

task, (P) *Debugger*, 16-13, 16-28

using vector mask, (P) *Debugger*, 15-13

variable, (P) *Debugger*, 3-14, 8-2, 8-14

vector address expression, (P) *Debugger*, 15-16

vector instruction, (P) *Debugger*, 15-9

vector register, (P) *Debugger*, 15-4

Example programs

asynchronous user interface, (P) *DECthreads*, 5-7

prime number search, (P) *DECthreads*, 5-1

EXCEPTION.EXE file

global symbols, (P) *VAX SDA*, SDA-64

EXCEPTION.STB file

global symbols, (P) *Alpha SDA*, SDA-61

Exception breakpoints or tracepoints

canceling, (P) *Debugger*, 13-11

qualifying, (P) *Debugger*, 13-15, B-10

resuming execution at, (P) *Debugger*, 13-12

setting, (P) *Debugger*, 3-9, 13-11

Exception conditions, (P) *Concepts*, 13-2, 13-6;

(P) *Interfaces*, 1-11; (P) *Calling Std*, 6-1; (P) *Rec Mgmt Util*, 2-4

See also Condition handlers

definition, (P) *Calling Std*, 1-4

handler, (P) *Calling Std*, 6-6

indicating, (P) *Calling Std*, 6-9

returning condition value, (P) *Concepts*, 13-7

signaling, (P) *Calling Std*, 6-9

signaling of, (P) *Concepts*, 13-6, 13-7, 13-16, 13-28, 13-49

system messages for, (G) *Help Msg*, 1-4

Exception handlers

debugging, (P) *Debugger*, 13-10

Exception-handling routines

global symbols, (P) *Alpha SDA*, SDA-61; (P) *VAX SDA*, SDA-64

/EXCEPTION qualifier, (P) *Debugger*, 13-10

Exceptions, (P) *DECthreads*, 4-1 to 4-11, A-7 to A-8, B-1

continuation from, (P) *Calling Std*, 6-18

definition, (P) *Concepts*, 13-2

dispatcher, (P) *Concepts*, 13-24

fatal, (P) *VAX SDA*, SDA-21

floating-point underflow, (P) *Concepts*, 13-17

handling by run-time library, (P) *Concepts*, 13-16

identifying causes of, (P) *VAX SDA*, SDA-25

recovering from, (P) *MTH\$*, 2-7

synchronization, (P) *Calling Std*, 6-17

type, (P) *Concepts*, 13-6

Exception vectors

setting, (P) *Sys Svc II*, SYS2-245

EXCHANGE (Exchange utility)

See Exchange utility

EXCHANGE command, (G) *DCL A-M*, DCLI-212

EXCHANGE/NETWORK command, (G) *DCL*

A-M, DCLI-213 to DCLI-221; (G) *SW*

Overview, 5-11

creating files, (G) *DCL A-M*, DCLI-216

protecting files, (G) *DCL A-M*, DCLI-216

qualifiers, (G) *DCL A-M*, DCLI-217

transferring files, (G) *DCL A-M*, DCLI-215

using to transfer files, (S) *Sys Mgr Essentials*, 9-19, 9-24

wildcard character, (G) *DCL A-M*, DCLI-216

Exchange utility (EXCHANGE)

Refer also to the *OpenVMS Exchange Utility Manual*

using to copy files, (S) *Sys Mgr Essentials*, 9-19

using to transfer information, (S) *Sys Mgr Essentials*, 9-24

Exclamation point (!)

as comment delimiter, (P) *Rec Mgmt Util*, 6-1

in distribution lists, (G) *User*, 6-7

log file, (P) *Debugger*, 12-5

/EXCLUDE qualifier

in Backup utility, (S) *Sys Mgmt Util A-L*, 7-30

Excluding devices, (S) *Sys Mgmt Util M-Z*, 6-38

Exclusion list

displaying, (S) *Sys Mgmt Util M-Z*, 6-41

eXcursion for Windows, (G) *SW Overview*, 6-23

%EXEC_ built-in symbols, (P) *Debugger*, 13-15, B-10

Executable images, (S) *Sys Mgr Tuning*, 16-9, 16-14, 16-15

See also Images and Programs

creating, (P) *Linker*, 1-13

definition, (P) *Linker*, 1-1

planning for and managing location, (S) *Comparison*, 2-7

specifying a base address, (P) *Linker*, LINK-43

/EXECUTABLE qualifier, (P) *Linker*, LINK-13

Execute access, (P) *Rec Mgmt Util*, 4-23

files, (S) *Security*, 5-8

for disk directory files, (S) *Sys Mgr Essentials*, 9-11

for disk files, (S) *Sys Mgr Essentials*, 9-6

global sections, (S) *Security*, 5-14

granting through protection codes, (S) *Security*, 4-25; (S) *Sys Mgr Essentials*, 11-8

EXECUTE command

in Monitor utility, (S) *Sys Mgmt Util M-Z*, 1-6

- Execute procedure (@) command, (G) *User*, 15-21; (G) *DCL A-M*, DCLI-8 to DCLI-12; (S) *Sys Mgr Tuning*, 20-16; (P) *VAX SDA*, SDA-45
- See also At sign (@)
- in LANCP utility, (S) *Sys Mgmt Util A-L*, 12-7
- in Show Cluster utility, (S) *Sys Mgmt Util M-Z*, 4-11
- to set up SHOW CLUSTER format, (S) *Sys Mgmt Util M-Z*, 4-11
- Executing
 - continuing interrupted DCL commands, (G) *DCL A-M*, DCLI-63
- Executing command procedures, (G) *User*, 15-21
 - as batch jobs, (G) *User*, 15-24
 - as remote batch jobs, (G) *User*, 15-25
 - from within other command procedures, (G) *User*, 15-21
 - interactively, (G) *User*, 15-23
 - on private disks, (G) *User*, 15-27
 - on remote nodes, (G) *User*, 15-21
 - on tape volumes, (G) *User*, 15-27
 - redirecting interactive output, (G) *User*, 15-24
 - restarting batch jobs, (G) *User*, 15-25
 - with automatic foreign commands, (G) *User*, 14-38
 - without using symbols, (G) *User*, 14-38
- Executing job status, (S) *Sys Mgr Essentials*, 13-69, 13-74
- Execution context, (P) *Concepts*, 1-2
- Execution modes, (S) *Sys Mgmt Util A-L*, 6-8
 - for SYSMAN Startup files, (S) *Sys Mgmt Util M-Z*, 6-66
 - startup procedures, (S) *Sys Mgr Essentials*, 5-19
- Execution queues, (G) *DCL A-M*, DCLI-259; (G) *SW Overview*, 3-11
 - activating autostart, (S) *Sys Mgr Essentials*, 13-4, 13-15, 13-49
 - creating, (S) *Sys Mgr Essentials*, 13-15
 - designating autostart or nonautostart, (G) *DCL A-M*, DCLI-260
 - failover, (S) *Dependable*, 9-18
 - relationship to generic queues, (S) *Sys Mgr Essentials*, 13-2
 - specifying node or node and device, (G) *DCL A-M*, DCLI-261
 - starting
 - autostart, (S) *Sys Mgr Essentials*, 13-4, 13-18, 13-48
 - in system startup, (S) *Sys Mgr Essentials*, 5-12
 - nonautostart, (S) *Sys Mgr Essentials*, 13-16, 13-18, 13-48
- Executive images
 - contents, (P) *Alpha SDA*, SDA-61, SDA-97; (P) *VAX SDA*, SDA-64, SDA-111
 - global symbols, (P) *Alpha SDA*, SDA-59; (P) *VAX SDA*, SDA-63
- Executive images (cont'd)
 - improving the performance of
 - using GHRs, (S) *Comparison*, 5-15
 - linking against, (P) *Linker*, LINK-34
 - slicing, (G) *Compatibility*, 4-11
 - SYS.EXE on VAX renamed to SYS\$BASE_IMAGE.EXE on Alpha systems, (S) *Comparison*, 2-26
- Executive mode, (S) *Alpha Perform*, 9-7
 - calling images running in, (S) *Sys Mgr Tuning*, 16-11, 16-14
 - changing to, (P) *Sys Svc I*, SYS1-110
 - logical names, (S) *Sys Mgr Tuning*, 16-15
 - recommended use for logical names, (S) *Sys Mgr Essentials*, 5-9
 - RMS, (S) *Alpha Perform*, 9-9
- Executive-mode (PSL\$C_EXEC) constant
 - for FAB\$V_CHAN_MODE, (P) *RMS Ref*, 4-6
- /EXECUTIVE qualifier, (P) *Alpha SDA*, SDA-59, SDA-151; (P) *VAX SDA*, SDA-63, SDA-177
- Executive stack pointer, (P) *Alpha SDA*, SDA-15; (P) *VAX SDA*, SDA-18
- /EXECUTIVE_MODE qualifier
 - ASSIGN command, (G) *DCL A-M*, DCLI-41
- Executor nodes, (S) *DECnet Mgmt*, 2-1, 4-1
 - See also Local nodes
 - clearing counters, (S) *DECnet Mgmt Util*, 3-160
 - commands, (S) *DECnet Mgmt*, 3-5
 - prefix identifier, (S) *DECnet Mgmt Util*, 3-154
 - management listener (NML), (S) *DECnet Mgmt Util*, 3-73
 - setting as the default command point, (S) *DECnet Mgmt Util*, 3-73
 - testing, (S) *DECnet Mgmt Util*, 3-51
- EXEC_INIT.STB file, (P) *Alpha SDA*, SDA-61
- Exit code sequences, (P) *Calling Std*, 3-46
 - example for register frame procedures, (P) *Calling Std*, 3-47
 - example for stack frame procedures, (P) *Calling Std*, 3-47
- EXIT command, (G) *DCL A-M*, DCLI-222 to DCLI-225; (S) *Sys Mgmt Util M-Z*, 6-32; (P) *File Appl*, 10-11; (P) *Debugger*, 5-10; (P) *Alpha SDA*, SDA-52; (P) *VAX SDA*, SDA-59
 - debugging exit handler, (P) *Debugger*, 13-16
 - in CLUE, (S) *Sys Mgmt Util A-L*, 8-7
 - in command procedures, (G) *User*, 15-13
 - in Install utility, (S) *Sys Mgmt Util A-L*, 11-11
 - in LANCP utility, (S) *Sys Mgmt Util A-L*, 12-16
 - in LATCP, (S) *Sys Mgmt Util A-L*, 13-22
 - in Mail, (G) *User*, 6-3
 - in Monitor utility, (S) *Sys Mgmt Util M-Z*, 1-7
 - in Show Cluster utility, (S) *Sys Mgmt Util M-Z*, 4-35
 - in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-32

- EXIT command (cont'd)
 - multiprocess program, (P) *Debugger*, 14-9, 14-10
 - using with command procedures, (G) *User*, 15-29
 - when to use, (G) *User*, 15-14
 - with condition codes, (G) *User*, 15-42
- Exit handlers, (P) *Concepts*, 3-43, 9-31, 13-73; (P) *SMG\$*, 4-3
 - canceling, (P) *Sys Svc I*, SYS1-79
 - control block, (P) *Sys Svc I*, SYS1-179
 - deleting, (P) *Sys Svc I*, SYS1-79
 - debugging, (P) *Concepts*, 13-76; (P) *Debugger*, 13-16
 - declaring, (P) *Sys Svc I*, SYS1-179
 - establishing, (P) *Concepts*, 13-74
 - executing, (P) *Debugger*, 5-10
 - execution sequence of, (P) *Debugger*, 13-16
 - identifying, (P) *Debugger*, 13-16
 - writing, (P) *Concepts*, 13-75
- Exiting
 - debugger, (P) *Debugger*, 5-10
 - from command procedures, (G) *User*, 15-29
- Exiting Image and Deleting Process fix, (S) *DECcmds*, 4-5
- EXITLOOP command, (P) *Debugger*, 12-10
- Exits
 - forced, (P) *Concepts*, 3-43
 - forcing, (P) *Sys Svc I*, SYS1-305
 - image, (P) *Concepts*, 3-41, 13-73
- exit_handler_block data type, (P) *Interfaces*, B-7
- EXPAND command, (P) *Debugger*, 11-13
- Expanded string, (P) *File Appl*, 6-4
 - requesting, (P) *RMS Ref*, 5-2
- Expanded string area address
 - See *ESA*
- Expanding program/control region, (P) *Sys Svc I*, SYS1-269
- EXPECTED_VOTES system parameter, (S) *VMScluster Sys*, 2-6, 8-12, 8-33, 8-36, 10-22, A-1
- Expiration
 - of account, (S) *Security*, 3-13
 - of password, (S) *Security*, 3-12, 7-13
 - of secondary password, (S) *Security*, 3-12
 - password system messages, (S) *Security*, 3-12
- EXPIRATION attribute, (P) *Rec Mgmt Util*, 4-15
- Expiration date
 - field, (S) *Sys Mgr Essentials*, 9-14; (P) *File Appl*, 1-28
 - checking, (S) *Sys Mgr Essentials*, 9-18
 - file, (S) *Sys Mgr Essentials*, 8-54
 - tape file system checks, (S) *Sys Mgr Essentials*, 9-17
- /EXPIRATION qualifier, (S) *Security*, 7-3
- Expiration time
 - obtaining, (P) *DECthreads*, pthread-43, cma-75
- Expired date suppression, (P) *RMS Ref*, 10-11
- /EXPIRED qualifier
 - in Backup utility, (S) *Sys Mgmt Util A-L*, 7-31
- Explanatory text
 - in argument documentation, (P) *Interfaces*, 1-10
 - in routine documentation, (P) *Interfaces*, 1-4
- expml routine, (P) *Portable Math*, DPML-31, B-7
- Exponential, (P) *MTH\$*, MTH-65, MTH-90
 - of complex number, (P) *MTH\$*, MTH-30, MTH-32
- Exponentiation
 - complex base to complex exponent, (P) *OTS\$*, OTS-55
 - complex base to signed integer exponent, (P) *OTS\$*, OTS-58
 - D-floating base, (P) *OTS\$*, OTS-59, OTS-61, OTS-63
 - F-floating base, (P) *OTS\$*, OTS-79, OTS-82, OTS-84
 - G-floating base, (P) *OTS\$*, OTS-65, OTS-68
 - H-floating base, (P) *OTS\$*, OTS-70, OTS-72
 - signed longword base, (P) *OTS\$*, OTS-75
 - word base to word exponent, (P) *OTS\$*, OTS-74
- Expressions, (P) *Alpha SDA*, SDA-12; (P) *VAX SDA*, SDA-15, SDA-19
 - See Address expressions and Language expressions
 - and symbols, (G) *User*, 14-8
 - converting value data types in, (G) *User*, 14-25
 - DCL evaluations of, (G) *User*, 14-24
 - evaluating, (P) *Alpha SDA*, SDA-45; (P) *VAX SDA*, SDA-53
 - logical, (G) *User*, 14-19, 14-20
 - precedence of operators, (G) *User*, 14-23
 - value tests, (G) *DCL A-M*, DCLI-245
- exp routine, (P) *Portable Math*, DPML-31, B-7
- EXQUOTA privilege, (S) *Security*, A-6
- Extend contiguity options and controls, (P) *File Appl*, 3-8
- Extended address space, (P) *Concepts*, 19-3, 19-4
 - physical address space, (P) *Concepts*, 19-3
 - virtual address space, (P) *Concepts*, 19-4
- Extended attribute blocks
 - See *XABs*
- Extended attribute records
 - See *XARs*
- Extended hours of operator coverage, (S) *Dependable*, 3-13
- Extended message acknowledgment, (S) *VMScluster Sys*, F-26

Extended QIO processor
 See XQP

Extended sequence numbers
 for datagram flags, (S) *VMSccluster Sys*, F-26

Extending a file, (P) *File Appl*, 3-4 to 3-8

Extend operations, (P) *File Appl*, 3-4 to 3-8

Extend placement controls for various file organizations, (P) *File Appl*, 3-8

Extends
 placement and contiguity options, (P) *File Appl*, 3-8

Extend service, (P) *RMS Ref*, RMS-36
 condition values, (P) *RMS Ref*, RMS-38
 control block input fields, (P) *RMS Ref*, RMS-37
 control block output fields, (P) *RMS Ref*, RMS-37
 invoking, (P) *RMS Ref*, 4-11
 use restriction, (P) *RMS Ref*, RMS-37
 XAB option overrides, (P) *RMS Ref*, RMS-37

Extend subfunction, (P) *I/O User*, 1-11

/EXTEND_QUANTITY qualifier, (P) *File Appl*, 9-7

Extensible Versatile Editor
 See EVE

EXTENSION attribute, (P) *Rec Mgmt Util*, 4-7, 4-19; (P) *File Appl*, 4-35

/EXTENSION qualifier
 in Mount utility, (S) *Sys Mgmt Util M-Z*, 2-19

Extensions
 See File extensions

Extents, (P) *File Appl*, 1-3, 1-5, 9-7
 defining section, (P) *Concepts*, 19-15, 20-15
 definition, (S) *Sys Mgr Tuning*, A-1
 disk
 definition, (S) *Sys Mgr Essentials*, 8-2
 index file
 definition, (S) *Sys Mgr Tuning*, A-7

External clock, (S) *DECnet Mgmt Util*, 3-77

External values
 pagelet units for some system parameters
 on Alpha systems, (S) *Comparison*, 5-3

EXTRACT command, (P) *Debugger*, 11-22
 in CLUE, (S) *Sys Mgmt Util A-L*, 8-7
 in Mail, (G) *User*, 6-10

Extracting software product release notes, (S) *Sys Mgr Essentials*, 3-29

/EXTRACT qualifier
 LIBRARY command, (P) *Concepts*, 17-2

F

F\$CONTEXT, (G) *Compatibility*, A-2

F\$CONTEXT lexical function, (G) *User*, 17-8, 17-9; (G) *DCL A-M*, DCLI-283, DCLI-286 to DCLI-291

F\$CSID lexical function, (G) *DCL A-M*, DCLI-283, DCLI-292, DCLI-293

F\$CVSI lexical function, (G) *DCL A-M*, DCLI-284, DCLI-294, DCLI-295

F\$CVTIME lexical function, (G) *User*, 17-13, 17-14; (G) *DCL A-M*, DCLI-284, DCLI-296, DCLI-297

F\$CVUI lexical function, (G) *DCL A-M*, DCLI-284, DCLI-298

F\$DEVICE lexical function, (G) *DCL A-M*, DCLI-284, DCLI-299, DCLI-300

F\$DIRECTORY lexical function, (G) *User*, 14-23; (G) *DCL A-M*, DCLI-284, DCLI-301

F\$EDIT lexical function, (G) *DCL A-M*, DCLI-284, DCLI-302, DCLI-303

F\$ELEMENT lexical function, (G) *User*, 17-13, 17-14; (G) *DCL A-M*, DCLI-284, DCLI-304, DCLI-305

F\$ENVIRONMENT lexical function, (G) *DCL A-M*, DCLI-284, DCLI-306 to DCLI-308
 changing default file protections with, (G) *User*, 17-5

F\$EXTRACT lexical function, (G) *User*, 17-13, 17-14; (G) *DCL A-M*, DCLI-284, DCLI-309, DCLI-310

F\$FAO lexical function, (G) *User*, 17-15; (G) *DCL A-M*, DCLI-284, DCLI-311 to DCLI-317

F\$FILE_ATTRIBUTES lexical function, (G) *DCL A-M*, DCLI-284, DCLI-318 to DCLI-320

F\$GETDVI lexical function, (G) *DCL A-M*, DCLI-284, DCLI-321 to DCLI-336

F\$GETJPI lexical function, (G) *DCL A-M*, DCLI-284, DCLI-337 to DCLI-342
 getting information about vector processing, (S) *Sys Mgr Tuning*, 26-9

F\$GETQUI lexical function, (G) *DCL A-M*, DCLI-284, DCLI-343 to DCLI-365; (S) *Sys Mgr Essentials*, 13-51
 obtaining queue information, (G) *User*, 17-7

F\$GETSYI lexical function, (G) *DCL A-M*, DCLI-284, DCLI-366 to DCLI-371; (G) *Compatibility*, A-3; (S) *Comparison*, 2-7
 arguments, (S) *Comparison*, 2-8
 getting information about vector processing, (S) *Sys Mgr Tuning*, 26-9
 obtaining information
 system, (G) *User*, 17-6, 17-7
 VMSccluster system, (G) *User*, 17-6, 17-7
 to identify target system, (G) *Compatibility*, 4-16

F\$IDENTIFIER lexical function, (G) *DCL A-M*, DCLI-284, DCLI-372, DCLI-373

F\$INTEGER lexical function, (G) *User*, 17-17;
 (G) *DCL A-M*, DCLI-284, DCLI-374
 converting data types, (G) *User*, 17-17
 F\$LENGTH lexical function, (G) *DCL A-M*,
 DCLI-285, DCLI-375
 with F\$LOCATE, (G) *User*, 17-13
 F\$LOCATE lexical function, (G) *DCL A-M*,
 DCLI-285, DCLI-376, DCLI-377
 with F\$LENGTH, (G) *User*, 17-13
 F\$LOGICAL lexical function, (G) *User*, 17-11
 See also F\$TRNLNM lexical function
 F\$MESSAGE lexical function, (G) *DCL A-M*,
 DCLI-285, DCLI-378, DCLI-379; (G) *Help*
Msg, 1-3
 F\$MODE lexical function, (G) *DCL A-M*,
 DCLI-285, DCLI-380, DCLI-381; (S)
Security, 3-4
 in login procedures, (G) *User*, 18-11
 F\$PARSE lexical function, (G) *User*, 17-13,
 17-14; (G) *DCL A-M*, DCLI-285, DCLI-382
 to DCLI-384
 F\$PID lexical function, (G) *User*, 17-7; (G) *DCL*
A-M, DCLI-285, DCLI-385, DCLI-386
 obtaining process information, (G) *User*, 17-7
 F\$PRIVILEGE lexical function, (G) *DCL A-M*,
 DCLI-285, DCLI-387
 F\$PROCESS lexical function, (G) *DCL A-M*,
 DCLI-285, DCLI-388
 F\$SEARCH lexical function, (G) *DCL A-M*,
 DCLI-285, DCLI-389 to DCLI-391
 searching for files, (G) *User*, 17-10
 using with DELETE command, (G) *User*, 17-11
 F\$SETPRV lexical function, (G) *DCL A-M*,
 DCLI-285, DCLI-392 to DCLI-395
 F\$STRING lexical function, (G) *DCL A-M*,
 DCLI-285, DCLI-396
 converting data types, (G) *User*, 17-17
 F\$TIME lexical function, (G) *DCL A-M*,
 DCLI-285, DCLI-397
 F\$TRNLNM lexical function, (G) *User*, 17-11;
 (G) *DCL A-M*, DCLI-285, DCLI-398 to
 DCLI-401
 translating logical names, (G) *User*, 17-11
 F\$TYPE lexical function, (G) *DCL A-M*,
 DCLI-402, DCLI-403
 identifying symbols, (G) *User*, 17-18
 F\$USER lexical function, (G) *DCL A-M*,
 DCLI-285, DCLI-404
 F\$VERIFY lexical function, (G) *User*, 17-4; (G)
DCL A-M, DCLI-285, DCLI-405, DCLI-406
 F11BXQPSTB file, (P) *Alpha SDA*, SDA-61
 FAB\$_ACMODES field, (P) *RMS Ref*, 4-3
 See also FAB\$_CHAN_MODE subfield and
 FAB\$_LNM_MODE subfield
 FAB\$_BID field, (P) *RMS Ref*, 4-3
 FAB\$_BKS field, (P) *RMS Ref*, 4-3 to 4-5; (P)
File Appl, 3-25, 4-32, 7-18
 FAB\$_BLN field, (P) *RMS Ref*, 4-4
 FAB\$_BLS field, (P) *File Appl*, 4-32
 FAB\$_DEQ field, (P) *File Appl*, 9-7
 FAB\$_DNS field, (P) *RMS Ref*, 4-9; (P) *File*
Appl, 9-7
 default file specification, (P) *RMS Ref*, 4-2
 FAB\$_FAC field, (P) *RMS Ref*, 4-9, 4-10; (P)
File Appl, 9-6
 comparing with FAB\$_SHR field, (P) *RMS*
Ref, 4-10
 for specifying sharing options, (P) *RMS Ref*,
 3-1, A-12
 interdependency with FAB\$_SHR field, (P)
RMS Ref, 4-28
 list of options, (P) *File Appl*, 7-3
 options, (P) *RMS Ref*, 4-10
 requirement for invoking Extend service, (P)
RMS Ref, RMS-37
 FAB\$_FNS field, (P) *RMS Ref*, 4-12; (P) *File*
Appl, 6-5, 9-6
 specifying primary file specification, (P) *RMS*
Ref, 4-2
 to specify file name size, (P) *RMS Ref*, A-20
 FAB\$_FSZ field, (P) *RMS Ref*, 4-18; (P) *File*
Appl, 4-33
 FAB\$_JOURNAL field, (P) *RMS Ref*, 4-20
 FAB\$_ORG field, (P) *RMS Ref*, 4-23; (P) *File*
Appl, 4-32
 FAB\$_PUT field
 requirement for invoking Extend service, (P)
RMS Ref, RMS-37
 FAB\$_RAT field, (P) *RMS Ref*, 4-24; (P) *File*
Appl, 4-34
 FAB\$_RFM field, (P) *RMS Ref*, 4-26; (P) *File*
Appl, 4-34
 FAB\$_RTV field, (P) *RMS Ref*, 4-27; (P) *File*
Appl, 9-8, 9-9
 FAB\$_SHR field, (P) *RMS Ref*, 4-27 to 4-28;
 (P) *File Appl*, 9-6
 FAB\$_MSE option, (P) *File Appl*, 7-21
 FAB\$_SHRGET option, (P) *File Appl*, 7-21
 FAB\$_UPI option, (P) *File Appl*, 7-6
 for specifying sharing options, (P) *RMS Ref*,
 3-1, A-12
 list of options, (P) *File Appl*, 7-4
 FAB\$_UPD field
 requirement for invoking Extend service, (P)
RMS Ref, RMS-37
 FAB\$_C options, (P) *RMS Ref*, 4-26
 FAB\$_ALQ field, (P) *RMS Ref*, 4-3; (P) *File*
Appl, 4-34
 setting at run time, (P) *RMS Ref*, A-5
 using to specify additional file space, (P) *RMS*
Ref, RMS-37

FAB\$L_CTX field, (P) RMS Ref, 4-6
 FAB\$L_DEV field, (P) RMS Ref, 4-7
 FAB\$L_DNA field, (P) RMS Ref, 4-9; (P) File Appl, 6-3, 9-7
 specifying default file specification, (P) RMS Ref, 4-2
 FAB\$L_FNA field, (P) RMS Ref, 4-11; (P) File Appl, 6-3, 6-5, 9-6
 specifying primary file specification, (P) RMS Ref, 4-2
 to specify file name string, (P) RMS Ref, A-20
 FAB\$L_FOP field, (P) RMS Ref, 4-12; (P) File Appl, 4-31
 FAB\$V_CBT option, (P) File Appl, 4-35
 FAB\$V_CTG option, (P) File Appl, 4-34
 FAB\$V_DFW option, (P) File Appl, 3-17, 3-18, 3-27, 3-28, 7-18, 7-19, 9-8
 FAB\$V_MXV option, (P) File Appl, 4-31
 FAB\$V_NAM option, (P) File Appl, 6-4
 FAB\$V_NEF option, (P) File Appl, 8-16, 8-17
 FAB\$V_OFF option, (P) File Appl, 6-8, 6-9
 FAB\$V_PPF option, (P) File Appl, 6-19
 FAB\$V_RCK option, (P) File Appl, 9-10
 FAB\$V_SQO option, (P) File Appl, 9-9
 FAB\$V_TMP option, (P) File Appl, 4-32
 FAB\$V_UFO option, (P) File Appl, 7-4, 9-13
 FAB\$V_WCK option, (P) File Appl, 9-10
 options, (P) RMS Ref, 4-13
 FAB\$L_MRN field, (P) RMS Ref, 4-21; (P) File Appl, 4-33
 FAB\$L_MRS field, (P) File Appl, 4-33
 FAB\$L_NAM field, (P) RMS Ref, 4-23; (P) File Appl, 6-8, 9-7
 FAB\$L_SDC field, (P) RMS Ref, 4-27
 FAB\$L_STS field, (P) RMS Ref, 4-29
 handling for ACL error status, (P) RMS Ref, 13-3
 FAB\$L_STV field, (P) RMS Ref, 4-29; (P) File Appl, 9-13
 examples of using, (P) RMS Ref, A-11
 for invoking \$QIO, (P) RMS Ref, 4-16
 for total number of blocks allocated, (P) RMS Ref, RMS-38
 with I/O channel, (P) RMS Ref, RMS-16
 FAB\$L_XAB field, (P) RMS Ref, 4-29
 FAB\$V_AI flag, (P) RMS Ref, 4-20
 FAB\$V_ASY option, (P) RMS Ref, 4-17
 FAB\$V_BI flag, (P) RMS Ref, 4-20
 FAB\$V_BIO option, (P) RMS Ref, 4-10
 how used to specify I/O type, (P) RMS Ref, A-35
 FAB\$V_BLK option, (P) RMS Ref, 4-24
 FAB\$V_BRO option, (P) RMS Ref, 4-29
 FAB\$V_CBT option, (P) RMS Ref, 4-13
 FAB\$V_CHAN_MODE subfield, (P) RMS Ref, 4-6
 FAB\$V_CIF option, (P) RMS Ref, 4-14
 FAB\$V_CR option, (P) RMS Ref, 4-24
 FAB\$V_CTG option, (P) RMS Ref, 4-14
 problem with fragmented disk, (P) File Appl, 3-8
 FAB\$V_DEL option, (P) RMS Ref, 4-10
 for enabling Delete service, (P) RMS Ref, A-31
 FAB\$V_DFW option, (P) RMS Ref, 4-17 to 4-18
 FAB\$V_DLT option, (P) RMS Ref, 4-15
 qualified use by Close service, (P) RMS Ref, RMS-4
 FAB\$V_FTN option, (P) RMS Ref, 4-24
 FAB\$V_GET option, (P) RMS Ref, 4-10, 4-11
 FAB\$V_LNM_MODE option, (P) RMS Ref, 4-21
 FAB\$V_LNM_MODE subfield, (P) RMS Ref, 4-21
 FAB\$V_MSB option, (P) RMS Ref, 4-25
 FAB\$V_MSE option, (P) RMS Ref, 4-28 to 4-29
 enabling multiple RABs, (P) RMS Ref, RMS-7
 requirement for read-only buffer cache, (P) RMS Ref, 4-19
 FAB\$V_MXV option, (P) RMS Ref, 4-14
 FAB\$V_NAM option, (P) RMS Ref, 4-14
 FAB\$V_NEF option, (P) RMS Ref, 4-16
 FAB\$V_NFS option, (P) RMS Ref, 4-16
 relationship to FAB\$V_CHAN_MODE subfield, (P) RMS Ref, 4-5
 FAB\$V_NIL option, (P) RMS Ref, 4-28
 effect on specifying user file open option, (P) RMS Ref, 4-16
 requirement for block I/O, (P) RMS Ref, A-34
 FAB\$V_OFF option, (P) RMS Ref, 4-14
 FAB\$V_POS option, (P) RMS Ref, 4-16
 FAB\$V_PRN option, (P) RMS Ref, 4-25
 FAB\$V_PUT option, (P) RMS Ref, 4-10, 4-11, 4-28
 FAB\$V_RCK option, (P) RMS Ref, 4-17
 FAB\$V_RU flag, (P) RMS Ref, 4-20
 FAB\$V_RWC option, (P) RMS Ref, 4-16
 FAB\$V_RWO option, (P) RMS Ref, 4-16
 FAB\$V_SCF option, (P) RMS Ref, 4-15
 qualified use by Close service, (P) RMS Ref, RMS-4
 FAB\$V_SHRDEL option, (P) RMS Ref, 4-29
 FAB\$V_SHRGET option, (P) RMS Ref, 4-28
 requirement for read-only buffer cache, (P) RMS Ref, 4-19
 FAB\$V_SPL option, (P) RMS Ref, 4-15
 qualified use by Close service, (P) RMS Ref, RMS-4
 FAB\$V_SQO option, (P) RMS Ref, 4-17
 prohibiting random access, (P) RMS Ref, RMS-50
 FAB\$V_SUP option, (P) RMS Ref, 4-14, 4-15
 FAB\$V_SYNCSTS option, (P) RMS Ref, 4-17
 FAB\$V_TEF option, (P) RMS Ref, 4-14
 FAB\$V_TMD option, (P) RMS Ref, 4-15
 inhibiting automatic Create, (P) RMS Ref, RMS-30

- FAB\$V_TMP option, (P) *RMS Ref*, 4-15
 - inhibiting automatic Create, (P) *RMS Ref*, RMS-30
- FAB\$V_TRN option
 - in file access field, (P) *RMS Ref*, 4-11
 - requirement for truncate-on-put operation, (P) *RMS Ref*, 6-18
- FAB\$V_UFO option, (P) *RMS Ref*, 4-16
 - effect on internal structures, (P) *RMS Ref*, 4-20
 - relationship to FAB\$V_CHAN_MODE subfield, (P) *RMS Ref*, 4-5
- FAB\$V_UPD option, (P) *RMS Ref*, 4-11, 4-29
 - requirement for implementing update-if option, (P) *RMS Ref*, 6-18
 - requirement for Update service, (P) *RMS Ref*, A-33
- FAB\$V_UPI option, (P) *RMS Ref*, 4-29
 - requirement for block I/O, (P) *RMS Ref*, A-34
 - requirement for user file open option, (P) *RMS Ref*, 4-16
- FAB\$V_WCK option, (P) *RMS Ref*, 4-18
- FAB\$W_BLS field, (P) *RMS Ref*, 4-5
- FAB\$W_DEQ field, (P) *RMS Ref*, 4-4, 4-6, 4-7; (P) *File Appl*, 4-35, 9-8
- FAB\$W_GBC field, (P) *RMS Ref*, 4-18, 4-19; (P) *File Appl*, 7-16, 7-20, 9-8
- FAB\$W_IFI field, (P) *RMS Ref*, 4-20
 - requirement for invoking Extend service, (P) *RMS Ref*, RMS-37
- FAB\$W_MRS field, (P) *RMS Ref*, 4-21
 - program example, (P) *RMS Ref*, A-15
- fab data type, (P) *Interfaces*, B-7
- \$FABDEF macro, (P) *File Appl*, 5-10
- FABs (file access blocks), (P) *Environment*, 10-16; (P) *Concepts*, 8-15; (P) *Interfaces*, B-7; (P) *RMS Ref*, 4-1; (P) *File Appl*, 1-30, 1-34, 4-1; (P) *Alpha SDA*, SDA-75; (P) *VAX SDA*, SDA-80
 - argument categories, (P) *RMS Ref*, 1-4
 - description, (P) *RMS Ref*, 1-3
 - requirements for, (P) *RMS Ref*, 4-2
- fabs routine, (P) *Portable Math*, DPML-32, B-7
- Facilities
 - creation, (P) *Modular Proc*, 5-1
 - library, (P) *Modular Proc*, 3-2
 - naming, (P) *Modular Proc*, 5-1
 - naming conventions, (P) *Modular Proc*, 3-1
 - number, (P) *Modular Proc*, 3-3
 - prefix, (P) *Modular Proc*, 3-1, 5-1
- .FACILITY directive, (P) *Concepts*, 13-58
- Facility identifiers, (S) *Security*, 4-4; (P) *Concepts*, 23-4
- Facility-specific data type code, (P) *Calling Std*, 4-7
- Facility-specific descriptor class codes, (P) *Calling Std*, 5-23
- Failover list
 - for an autostart queue
 - specifying, (S) *Sys Mgr Essentials*, 13-15
 - for queue manager, (S) *Sys Mgr Essentials*, 12-3, 12-9
 - insufficient, (S) *Sys Mgr Essentials*, 12-17
 - specifying, (S) *Sys Mgr Essentials*, 12-9
- Failovers
 - application, (S) *Dependable*, 8-54
 - autostart, (G) *DCL A-M*, DCLI-271
 - autostart queues, (G) *DCL A-M*, DCLI-174, DCLI-202, DCLI-261; (G) *DCL N-Z*, DCLII-367
 - batch and print queue, (S) *Dependable*, 9-18
 - between LAN bridges, (S) *VMScluster Sys*, 3-20
 - capturing user requests, (S) *Dependable*, 8-57
 - database in VMSclusters, (S) *Dependable*, 8-35
 - dual-host VMScluster configuration, (S) *VMScluster Sys*, 3-4
 - dual-ported disks, (S) *VMScluster Sys*, 6-3
 - dual-ported DSA tape, (S) *VMScluster Sys*, 6-14
 - LAN bridge, (S) *VMScluster Sys*, 3-20
 - of queue manager, (G) *DCL N-Z*, DCLII-379; (S) *Sys Mgr Essentials*, 12-3, 12-17; (S) *VMScluster Sys*, 7-3
 - forcing, (S) *Sys Mgr Essentials*, 12-9
 - of queues, (S) *Sys Mgr Essentials*, 13-4, 13-15
 - preventing, (G) *DCL A-M*, DCLI-174
 - queue manager's capabilities, (S) *Dependable*, 8-28
 - strategy, (S) *Dependable*, 8-22
 - terminal, (S) *Dependable*, 8-52, 8-55
- Failure recovery strategies, (S) *Dependable*, 1-10 to 1-12, 1-16
- Failures, (S) *Dependable*, 9-12 to 9-13
 - See also Login failures
 - areas where they occur, (S) *Dependable*, 3-1
 - causes, (S) *Dependable*, 9-10
 - eliminating single points of, (S) *Dependable*, 6-1
 - in software applications, (S) *Dependable*, 8-1
 - lack of software scalability, (S) *Dependable*, 8-30
 - of a network node, (S) *Dependable*, 4-11
 - of an interconnect path, (S) *Dependable*, 4-11
- FAL\$SERVER account
 - enabling default access, (S) *DECnet Mgmt*, 2-25, 2-26, 5-3, 5-6
- FAL (file access listener), (S) *DECnet Mgmt*, 1-12, 2-25
 - accessing remote files, (S) *DECnet Intro*, 2-2
 - default access account, (S) *DECnet Intro*, 3-13
- FAL\$SERVER account

- FAL (file access listener)
 - FAL\$SERVER account (cont'd)
 - default access, (S) *DECnet Mgmt*, 2-25, 5-3, 5-6
 - on Alpha, (G) *Compatibility*, 2-6
 - on Alpha systems, (S) *Comparison*, 6-2
- False expression
 - and IF command, (G) *DCL A-M*, DCLI-245
- False failures
 - in hardware components, (S) *Dependable*, 9-13
- FAO argument
 - signaling, (P) *Concepts*, 13-62
- FAO lexical directives, (G) *DCL A-M*, DCLI-311 to DCLI-317
- FAO parameter
 - specifying, (P) *Concepts*, 13-62
- \$FAO system service directives
 - format of, (P) *Sys Svc I*, SYS1-274
 - table of, (P) *Sys Svc I*, SYS1-275
- /FAO_COUNT qualifier
 - Message utility (MESSAGE), (P) *Concepts*, 13-60
- Fastboot, (G) *Compatibility*, 1-9
- Fast-delete option, (P) *File Appl*, 8-4, 9-8
 - See also RAB\$V_FDL option
- /FAST qualifier
 - in Backup utility, (S) *Sys Mgmt Util A-L*, 7-31
- FAST_DELETE attribute, (P) *Rec Mgmt Util*, 4-10
- Fatal exceptions, (P) *Alpha SDA*, SDA-19; (P) *VAX SDA*, SDA-21
- FATALEXCPT bugcheck, (P) *Alpha SDA*, SDA-19; (P) *VAX SDA*, SDA-21
- Fault prevention
 - strategies, (S) *Dependable*, 1-10 to 1-12
- Fault rate for pages, (S) *DECamds*, 3-12
- Faults
 - See Pages
 - hard
 - rate, (S) *Alpha Perform*, 11-6
- Fault tolerance, (G) *SW Overview*, 2-12
 - business example, (S) *Dependable*, 1-3
 - example, (S) *Dependable*, 1-9
 - software
 - provided by DEC Reliable Transaction Router, (S) *Dependable*, 8-2 to 8-10
 - VAXft systems, (S) *Dependable*, 6-8
- Fault-tolerant systems, (G) *SW Overview*, 1-14, 2-12
- FCBs (file control blocks), (P) *Alpha SDA*, SDA-75; (P) *VAX SDA*, SDA-80
- FCP class record
 - in Monitor utility, (S) *Sys Mgmt Util M-Z*, A-17
- FDDI (Fiber Distributed Data Interface), (G) *SW Overview*, 1-6; (S) *DECnet Intro*, 1-9; (S) *DECnet Mgmt*, 1-6; (S) *DECnet Mgmt Util*, 3-81
 - See also LANs
 - asynchronous data transmission in, (S) *DECnet Mgmt*, 1-7
 - business use of, (S) *Dependable*, 1-2
 - circuit, (S) *DECnet Mgmt*, 1-3
 - circuit device, (S) *DECnet Mgmt*, 2-11
 - circuit identification, (S) *DECnet Mgmt*, 3-26
 - circuit parameters, (S) *DECnet Mgmt*, 3-33
 - communications interconnects, (G) *SW Overview*, 1-8, 1-11
 - configurations, (S) *Dependable*, 6-17; (S) *VMScluster Sys*, 3-5, 3-15; (S) *DECnet Intro*, 1-9; (S) *DECnet Mgmt*, 1-3, 1-6
 - configuring adapter, (S) *VMScluster Sys*, 9-5
 - Data Link layer, (S) *DECnet Mgmt*, 1-6
 - device drivers, (S) *Sys Mgr Tuning*, 22-2; (P) *I/O User*, 9-2
 - ECHO DATA, (S) *DECnet Mgmt Util*, 3-12, 3-78
 - ECHO LENGTH, (S) *DECnet Mgmt Util*, 3-12, 3-78
 - ECHO TARGET, (S) *DECnet Mgmt Util*, 3-13, 3-78
 - error-log entry, (S) *VMScluster Sys*, C-33
 - hardware address, (S) *VMScluster Sys*, 8-5
 - header for datagrams, (S) *VMScluster Sys*, F-22
 - implementation options, (S) *Dependable*, 7-8
 - influence of LRPSIZE on, (S) *VMScluster Sys*, 10-17
 - large-packet support, (S) *VMScluster Sys*, 10-17
 - line device, (S) *DECnet Mgmt*, 2-14
 - line protocol, (S) *DECnet Mgmt*, 3-37
 - Logical Link Control sublayer, (S) *DECnet Mgmt*, 1-6
 - massively distributed shadowing, (S) *VMScluster Sys*, 6-24
 - Media Access Control sublayer, (S) *DECnet Mgmt*, 1-6, 1-7
 - monitoring activity, (S) *VMScluster Sys*, 10-25
 - multiaccess communications channel, (S) *Sys Mgr Tuning*, 21-8
 - multiple adapters, (S) *VMScluster Sys*, 3-15
 - multiple-site VMScluster configurations, (G) *V6.2 New Feat*, 8-4
 - network configuration, (S) *DECnet Mgmt*, 5-21
 - NIF TARGET, (S) *DECnet Mgmt Util*, 3-13, 3-80
 - port, (S) *VMScluster Sys*, C-19
 - providing multiple paths to, (S) *Dependable*, 7-4
 - REQUESTED TRT, (S) *DECnet Mgmt Util*, 3-13, 3-81

FDDI (Fiber Distributed Data Interface) (cont'd)

- RESTRICTED TOKEN TIMEOUT, (S) *DECnet Mgmt Util*, 3-13, 3-81
- ring operation, (S) *DECnet Mgmt*, 1-7
- RING PURGER ENABLE, (S) *DECnet Mgmt Util*, 3-13, 3-82
- SIF CONFIGURATION TARGET, (S) *DECnet Mgmt Util*, 3-14, 3-82
- SIF OPERATION TARGET, (S) *DECnet Mgmt Util*, 3-14, 3-82
- specification, (S) *DECnet Mgmt*, 1-6
- support on Alpha, (G) *Compatibility*, 2-7
- support on Alpha systems, (S) *Comparison*, 6-2
- supports VAXcluster technology, (S) *Sys Mgr Tuning*, 21-8
- token passing, (S) *DECnet Mgmt*, 1-7
- used in VMSclusters, (S) *Dependable*, 6-17
- use of priority field, (S) *VMScluster Sys*, 10-17
- using as VMScluster interconnect, (S) *Dependable*, 7-12
- VALID TRANSMISSION TIME, (S) *DECnet Mgmt Util*, 3-14, 3-83

FDL\$CREATE routine, (P) *Rec Mgmt Util*, 5-2; (P) *Util Routines*, FDL-7

FDL\$GENERATE routine, (P) *Rec Mgmt Util*, 5-2; (P) *Util Routines*, FDL-13

FDL\$PARSE routine, (P) *RMS Ref*, A-20; (P) *Rec Mgmt Util*, 5-2; (P) *Util Routines*, FDL-16

FDL\$RELEASE routine, (P) *RMS Ref*, A-20; (P) *Util Routines*, FDL-19

FDL (File Definition Language), (S) *TCP/IP*, 5-5; (P) *Environment*, 10-19; (P) *Rec Mgmt Util*, 4-1; (P) *File Appl*, 1-33, 3-16, 4-2; (P) *Util Routines*, FDL-1

- ACCESS section, (P) *Rec Mgmt Util*, 4-2
- ANALYSIS_OF_AREA section, (P) *Rec Mgmt Util*, 4-3
- ANALYSIS_OF_KEY section, (P) *Rec Mgmt Util*, 4-4
- AREA section, (P) *Rec Mgmt Util*, 4-6
- attributes, (P) *File Appl*, 4-2
- CONNECT section, (P) *Rec Mgmt Util*, 4-8
- DATE section, (P) *Rec Mgmt Util*, 4-15
- editor, (P) *Rec Mgmt Util*, 6-3
- file, (P) *Environment*, 10-19
- FILE section, (P) *Rec Mgmt Util*, 4-16
- generation of file over the network, (S) *DECnet Intro*, 2-8
- IDENT section, (P) *Rec Mgmt Util*, 4-37
- KEY section, (P) *Rec Mgmt Util*, 4-25
- NETWORK section, (P) *Rec Mgmt Util*, 4-30
- ordering of AREA sections, (P) *Rec Mgmt Util*, 6-1
- predefined attributes using FDL\$PARSE routine, (P) *File Appl*, 9-1
- processing files with comment lines containing semicolons, (P) *Rec Mgmt Util*, 6-1

FDL (File Definition Language) (cont'd)

- RECORD section, (P) *Rec Mgmt Util*, 4-31
- routine for creating data files, (P) *Rec Mgmt Util*, 5-2
- scripts, (P) *File Appl*, 4-2
- SHARING section, (P) *Rec Mgmt Util*, 4-35
- syntax, (P) *Rec Mgmt Util*, 5-1; (P) *File Appl*, 4-2
- SYSTEM section, (P) *Rec Mgmt Util*, 4-36
- TITLE section, (P) *Rec Mgmt Util*, 4-37

FDL ANALYSIS_OF_AREA attributes, (P) *Rec Mgmt Util*, 1-25

FDL ANALYSIS_OF_KEY attributes, (P) *Rec Mgmt Util*, 1-25, 4-4

FDL ANALYSIS_OF_KEY section

- using in Edit/FDL optimize script, (P) *Rec Mgmt Util*, 4-4

FDL AREA section, (P) *File Appl*, 3-24

- BEST_TRY_CONTIGUOUS attribute, (P) *File Appl*, 4-35
- EXACT_POSITIONING attribute, (P) *File Appl*, 4-35
- POSITION attribute, (P) *File Appl*, 4-35
- VOLUME attribute, (P) *File Appl*, 4-36

FDL CONNECT attributes, (P) *Rec Mgmt Util*, 4-8

FDL CONNECT section

- ASYNCHRONOUS attribute, (P) *File Appl*, 9-8, 9-13, 9-16, 9-18
- DELETE_ON_CLOSE attribute, (P) *File Appl*, 9-11
- END_OF_FILE attribute, (P) *File Appl*, 9-10
- FAST_DELETE attribute, (P) *File Appl*, 9-8, 9-11, 9-18
- FILL_BUCKETS attribute, (P) *File Appl*, 9-12, 9-16
- GLOBAL_BUFFER_COUNT attribute, (P) *File Appl*, 9-8
- KEY_GREATER_EQUAL attribute, (P) *File Appl*, 8-8, 8-9, 9-11, 9-14
- KEY_GREATER_THAN attribute, (P) *File Appl*, 8-8, 8-9, 9-12, 9-14
- KEY_LIMIT attribute, (P) *File Appl*, 9-12, 9-14
- KEY_OF_REFERENCE attribute, (P) *File Appl*, 9-12, 9-14
- LOCATE_MODE attribute, (P) *File Appl*, 9-9, 9-14
- LOCK_ON_READ attribute, (P) *File Appl*, 7-11, 9-14
- LOCK_ON_WRITE attribute, (P) *File Appl*, 7-11, 9-15, 9-16
- MANUAL_LOCKING attribute, (P) *File Appl*, 9-15
- MANUAL_UNLOCKING attribute, (P) *File Appl*, 7-14
- MULTIBLOCK_COUNT attribute, (P) *File Appl*, 3-14, 7-17, 9-9

FDL CONNECT section (cont'd)

- MULTIBUFFER_COUNT attribute, (*P*) *File Appl*, 3-14, 3-16, 3-27, 7-16 to 7-19, 9-9
- NOLOCK attribute, (*P*) *File Appl*, 7-11, 9-14
- NONEXISTENT_RECORD attribute, (*P*) *File Appl*, 7-14, 8-8, 9-14
- READ_AHEAD attribute, (*P*) *File Appl*, 9-9, 9-15
- READ REGARDLESS attribute, (*P*) *File Appl*, 7-12, 9-15
- TIMEOUT_PERIOD attribute, (*P*) *File Appl*, 7-12, 9-15, 9-17
- TRUNCATE_ON_PUT attribute, (*P*) *File Appl*, 9-10, 9-17
- UPDATE_IF attribute, (*P*) *File Appl*, 8-7, 9-10, 9-17
- WAIT_FOR_RECORD attribute, (*P*) *File Appl*, 7-12, 9-16
- WRITE_BEHIND attribute, (*P*) *File Appl*, 9-9, 9-17
- FDL editor, (*P*) *Rec Mgmt Util*, 6-3; (*P*) *File Appl*, 1-37
- FDL files, (*P*) *Rec Mgmt Util*, 5-2, 5-3
 - creating, (*P*) *Rec Mgmt Util*, 5-1; (*P*) *File Appl*, 4-2
 - creating data files, (*P*) *File Appl*, 4-15
 - creating interactively, (*P*) *Rec Mgmt Util*, 6-13
 - creating with ANALYZE/RMS_FILE command, (*P*) *Rec Mgmt Util*, 1-9, 1-11, 6-1
 - creating with Edit/FDL utility, (*P*) *Rec Mgmt Util*, 6-4
 - creating with FDL\$GENERATE routine, (*P*) *File Appl*, 4-13
 - designing, (*P*) *File Appl*, 4-10
 - displaying specification, (*P*) *Rec Mgmt Util*, 5-4
 - examining with ANALYZE/RMS_FILE, (*P*) *File Appl*, 10-1
 - file type, (*P*) *Rec Mgmt Util*, 6-8
 - generating from a data file, (*P*) *File Appl*, 10-22
 - how to comment, (*P*) *Rec Mgmt Util*, 6-1
 - manipulating with Edit/FDL utility, (*P*) *Rec Mgmt Util*, 6-3
 - specifying output file name, (*P*) *Rec Mgmt Util*, 6-8
 - using analysis output, (*P*) *Rec Mgmt Util*, 6-4
 - using with the Convert utility, (*P*) *Rec Mgmt Util*, 2-1
- FDL FILE section
 - ALLOCATION attribute, (*P*) *File Appl*, 3-4, 3-25, 4-34
 - BEST_TRY_CONTIGUOUS attribute, (*P*) *File Appl*, 3-4, 4-35
 - BUCKET_SIZE attribute, (*P*) *File Appl*, 3-16, 3-25, 4-32, 7-18
 - CONTIGUOUS attribute, (*P*) *File Appl*, 3-4, 3-25, 4-34

FDL FILE section (cont'd)

- CONTROL_FIELD_SIZE attribute, (*P*) *File Appl*, 4-33
- CREATE_IF attribute, (*P*) *File Appl*, 4-31
- DEFAULT_NAME attribute, (*P*) *File Appl*, 6-3, 9-7
- DEFERRED_WRITE attribute, (*P*) *File Appl*, 3-17, 3-27, 7-18, 7-19, 9-8
- DIRECTORY_ENTRY attribute, (*P*) *File Appl*, 4-32
- EXTENSION attribute, (*P*) *File Appl*, 4-35, 9-7, 9-8
- GLOBAL_BUFFER_COUNT attribute, (*P*) *File Appl*, 3-12, 7-16, 7-20
- MAXIMIZE_VERSION attribute, (*P*) *File Appl*, 4-31
- MAX_RECORD_NUMBER attribute, (*P*) *File Appl*, 4-33
- MT_BLOCK_SIZE attribute, (*P*) *File Appl*, 4-32
- MT_CLOSE_REWIND attribute, (*P*) *File Appl*, 9-13
- MT_CURRENT_POSITION attribute, (*P*) *File Appl*, 9-12
- MT_NOT_EOF attribute, (*P*) *File Appl*, 9-12
- MT_OPEN_REWIND attribute, (*P*) *File Appl*, 9-13
- MT_PROTECTION attribute, (*P*) *File Appl*, 4-32
- NAME attribute, (*P*) *File Appl*, 6-3, 9-6
- NON_FILE_STRUCTURED attribute, (*P*) *File Appl*, 9-13
- ORGANIZATION attribute, (*P*) *File Appl*, 4-32
- OWNER attribute, (*P*) *File Appl*, 4-32
- PRINT_ON_CLOSE attribute, (*P*) *File Appl*, 9-11
- PROTECTION attribute, (*P*) *File Appl*, 4-32
- READ_CHECK attribute, (*P*) *File Appl*, 9-10
- REVISION attribute, (*P*) *File Appl*, 4-32
- SEQUENTIAL_ONLY attribute, (*P*) *File Appl*, 9-9
- SUBMIT_ON_CLOSE attribute, (*P*) *File Appl*, 9-11
- SUPERSEDE attribute, (*P*) *File Appl*, 4-31
- TEMPORARY attribute, (*P*) *File Appl*, 4-31
- USER_FILE_OPEN attribute, (*P*) *File Appl*, 7-4, 9-13
- WINDOW_SIZE attribute, (*P*) *File Appl*, 9-8, 9-9
- WRITE_CHECK attribute, (*P*) *File Appl*, 9-10
- .FDL file type, (*P*) *Rec Mgmt Util*, 1-13
- FDL KEY section, (*P*) *File Appl*, 4-33
 - DATA_AREA attribute, (*P*) *File Appl*, 3-25
 - DATA_FILL attribute, (*P*) *File Appl*, 3-26
 - INDEX_AREA attribute, (*P*) *File Appl*, 3-25
 - INDEX_FILL attribute, (*P*) *File Appl*, 3-26
 - LEVEL1_INDEX_AREA attribute, (*P*) *File Appl*, 3-25

FDL KEY section (cont'd)

TYPE attribute, (P) *File Appl*, 3-23
FDL option, (P) *Rec Mgmt Util*, 4-10
/FDL qualifier, (P) *File Appl*, 10-22
FDL RECORD section
BLOCK_SPAN attribute, (P) *File Appl*, 3-14, 4-33, 4-34
CARRIAGE_CONTROL attribute, (P) *File Appl*, 4-34
CARRIAGE_RETURN attribute, (P) *File Appl*, 4-33
count field format attribute, (P) *File Appl*, 4-33
FORMAT attribute, (P) *File Appl*, 4-34
Fortran attribute, (P) *File Appl*, 4-33
Fortran carriage control attribute, (P) *File Appl*, 4-33
MSB_RECORD_LENGTH attribute, (P) *File Appl*, 4-33
PRINT attribute, (P) *File Appl*, 4-33
PRINT carriage control attribute, (P) *File Appl*, 4-33
SIZE attribute, (P) *File Appl*, 4-33
FDL routines, (P) *Util Routines*, FDL-1
examples, (P) *Util Routines*, FDL-3 to FDL-6
FDL\$CREATE routine, (P) *File Appl*, 4-13, 4-16, 6-3
FDL\$GENERATE routine, (P) *File Appl*, 4-13
FDL\$PARSE routine, (P) *File Appl*, 4-13, 6-3, 9-1
example, (P) *File Appl*, 9-18 to 9-20
FDL\$RELEASE routine, (P) *File Appl*, 4-13, 6-3, 9-1
example, (P) *File Appl*, 9-18 to 9-20
FDL SHARING attributes, (P) *File Appl*, 7-4, 7-6, 7-21
FDL specifications
creating, (P) *Util Routines*, FDL-7
default attributes, (P) *Util Routines*, FDL-10, FDL-17
generating, (P) *Util Routines*, FDL-13
in character string, (P) *Util Routines*, FDL-2, FDL-9
parsing, (P) *Util Routines*, FDL-16
semicolons as delimiters, (P) *Util Routines*, FDL-2
with CONVERT routines, (P) *Util Routines*, CONV-13
Federal Information Processing Standards
See FIPS
FEEDBACK mode, (S) *Sys Mgmt Util A-L*, 6-3, 6-8
Feedback option, (S) *VMScluster Sys*, 8-42
FEN symbol, (P) *Alpha SDA*, SDA-15
FHM (file high-water mark), (G) *DCL A-M*, DCLI-253
Fiber Distributed Data Interface
See FDDI

Fiber-optic cables

See FDDI

Fiber optic links, (S) *DECnet Intro*, 1-7

FIBs (file information blocks), (P) *I/O User*, 1-3

See also ACP functions

access control, (P) *I/O User*, 1-10

contents, (P) *I/O User*, 1-5 to 1-7

descriptor, (P) *I/O User*, 1-2, 1-3

directory lookup, (P) *I/O User*, 1-8

disk quota, (P) *I/O User*, 1-35 to 1-36

extend control, (P) *I/O User*, 1-11

format, (P) *I/O User*, 1-4

IO\$_ACCESS, (P) *I/O User*, 1-26

IO\$_ACPCONTROL, (P) *I/O User*, 1-33 to 1-36

IO\$_CREATE, (P) *I/O User*, 1-23

IO\$_DEACCESS, (P) *I/O User*, 1-27

IO\$_DELETE, (P) *I/O User*, 1-29

IO\$_MODIFY, (P) *I/O User*, 1-28

truncate control, (P) *I/O User*, 1-13

FIELD account

initial modification, (S) *Sys Mgr Essentials*, 6-9

in UAF, (S) *Sys Mgr Essentials*, 6-7

Field length

identifier in symbolic name, (P) *RMS Ref*, 2-2

Field of data

definition, (S) *Sys Mgmt Util M-Z*, 4-19

definition of each, (S) *Sys Mgmt Util M-Z*, 4-28

in SHOW CLUSTER, (S) *Sys Mgr Tuning*, 20-4

removing, (S) *Sys Mgr Tuning*, 20-11; (S) *Sys Mgmt Util M-Z*, 4-44

Fields, (G) *User*, 11-1; (P) *File Appl*, 1-1

See also Sort/Merge utility (SORT/MERGE)

SHOW CLUSTER, (S) *Sys Mgmt Util M-Z*, 4-3

sorting, (G) *User*, 11-2

Field Service accounts

in UAF, (S) *Sys Mgr Essentials*, 6-7

FIFO (first-in/first-out) scheduling, (P) *DECthreads*, 2-5

File access

See also File protection

category summary, (P) *File Appl*, 4-26

controlling, (P) *Util Routines*, ACL-1

defaults, (P) *File Appl*, 7-5

disk, (S) *Sys Mgr Essentials*, 9-13

from remote notes, (G) *User*, 4-7

in a VMScluster, (P) *File Appl*, 3-33

listing number of concurrent, (S) *Sys Mgr Tuning*, 16-8

of a remote host, (S) *Sys Mgr Tuning*, 21-14

options, (P) *File Appl*, 4-26

over network, (S) *DECnet Mgmt*, 1-2

protection, (P) *Interfaces*, B-7

remote, (S) *DECnet Intro*, 2-2; (S) *DECnet Mgmt*, 1-17

File access (cont'd)

- sensing tags, (P) *File Appl*, 4-23
- strategies, (P) *Concepts*, 8-2
- tape, (S) *Sys Mgr Essentials*, 9-13, 9-14
- using control strings, (G) *User*, 4-8

File access blocks

- See FABs

File access listener

- See FAL

FILE ATTRIBUTES structure, (P) *File Appl*, 10-12, 10-15, 10-16

File banner pages, (S) *Sys Mgr Essentials*, 13-42, 13-60

File browsers, (G) *User*, 19-12; (S) *Security*, 3-18, 10-5, 10-6

File characteristics, (P) *File Appl*, 4-31, 4-32

- ACP-QIO attributes, (P) *I/O User*, 1-18

FILE command

- in Mail, (G) *User*, 6-12

File component descriptors, (P) *RMS Ref*, 5-2 to 5-3

File conversions

- exception conditions, (P) *Rec Mgmt Util*, 2-4
- of VFC records, (P) *Rec Mgmt Util*, 2-11

File corruption, (P) *File Appl*, 10-2

File default extension quantity, (P) *File Appl*, 3-5

- with multiple areas, (P) *File Appl*, 3-7

File Definition Language

- See FDL

File design attributes, (P) *File Appl*, 3-4

File disposition, (P) *File Appl*, 9-11

File expiration date

- specifying retention time values, (G) *DCL N-Z*, DCLII-237

File Expiration Date and Time

- evaluation criteria, (P) *RMS Ref*, 10-11
- how used, (P) *RMS Ref*, 10-12

File-extend parameters

- setting, (S) *Alpha Perform*, 4-2

File extensions, (G) *DCL A-M*, DCLI-37; (P)

- RMS Ref*, RMS-37; (P) *File Appl*, 3-24

- automatic, (P) *File Appl*, 3-5, 3-6

- calculating size, (P) *File Appl*, 9-7

- changing default size, (G) *DCL N-Z*, DCLII-235

- effect on system performance, (S) *Sys Mgr Tuning*, 16-7

- invoking by way of \$EXTEND service, (P) *File Appl*, 3-5

- methods, (P) *File Appl*, 3-5

- size, (P) *File Appl*, A-1

- size and performance, (P) *File Appl*, 9-7

- specifying size, (S) *Sys Mgr Essentials*, 8-22; (S) *Sys Mgr Tuning*, 16-7

- system parameter controlling, (S) *Sys Mgr Tuning*, 16-7

File formats

- compatibility in mixed-architecture VMScluster system, (G) *Compatibility*, 4-16, 4-18
- use with BACKUP, (S) *Sys Mgr Essentials*, 10-9

File fragmentation

- of page and swap files, (S) *Sys Mgr Tuning*, 15-27

File handling

- network operations, (S) *DECnet Intro*, 2-4

File header label

- See Header labels

File headers, (P) *Rec Mgmt Util*, 1-1; (P) *File Appl*, 1-7, 3-13, 3-15, 3-18

- Files-11 structure, (P) *File Appl*, 1-7

- index file, (S) *Sys Mgr Tuning*, A-7

- contents, (S) *Sys Mgr Tuning*, A-7

- extension, (S) *Sys Mgr Tuning*, A-8

- primary, (S) *Sys Mgr Tuning*, A-8

FILE HEADER structure, (P) *File Appl*, 10-12, 10-15, 10-16

File identification, (S) *Sys Mgr Tuning*, A-4

File identifier field, (P) *File Appl*, 1-26

File images

- analyzing, (G) *DCL A-M*, DCLI-21

- fixup section analyzing, (G) *DCL A-M*, DCLI-22

File Log

- VMSINSTAL.COM option, (S) *Sys Mgr Essentials*, 3-17

File management, (P) *Environment*, 6-1, 6-2, 10-2

- system services, (P) *Environment*, 10-5

File names, (G) *User*, 4-2

- See also File specifications

- changes, (G) *Compatibility*, 1-6

- changing, (G) *DCL N-Z*, DCLII-37

- on Files-11 volume, (S) *Sys Mgr Tuning*, A-7

- OpenVMS extended, (S) *Sys Mgr Essentials*, 9-16

- rules for entering, (G) *User*, 4-2

- specifying a list of, (G) *User*, 5-6

- standard, (S) *Sys Mgr Essentials*, 9-16

- using an asterisk (*) wildcard character in, (G) *User*, 4-9

- using a percent sign (%) wildcard character in, (G) *User*, 4-10

- valid characters in, (G) *User*, 4-2

- with null values, (G) *User*, 4-10

File name strings

- component parts, (P) *RMS Ref*, A-20

File objects, (G) *DCL A-M*, DCLI-25 to DCLI-28

File-opening options, (P) *File Appl*, 9-6 to 9-13

- See also Creation-time options

File Optimizer

- defragmenting disks, (G) *SW Overview*, 7-6

File Optimizer (cont'd)

reducing file fragmentation, (G) *SW Overview*, 7-7

File organization, (P) *RMS Ref*, 1-3; (P) *Rec Mgmt Util*, 1-1; (P) *File Appl*, 1-2, 2-13, 2-14

See also Indexed files, Relative files, and Sequential files

changing over the network, (S) *DECnet Intro*, 2-9

changing with CONVERT routines, (P) *Util Routines*, CONV-1

selecting, (P) *File Appl*, 2-1

File organization option, (P) *File Appl*, 4-32

File positioning, (P) *File Appl*, 4-34

effect on shared files, (P) *RMS Ref*, RMS-7

File processing

many files, (P) *File Appl*, 5-15 to 5-16

naming convention options, (P) *RMS Ref*, 4-12

nonstandard file, (P) *File Appl*, 9-13

option categories listed, (P) *RMS Ref*, 4-12

RMS services listed, (P) *RMS Ref*, 1-1

service output options, (P) *RMS Ref*, 4-12

services listed, (P) *RMS Ref*, 1-1

single file, (P) *File Appl*, 5-14 to 5-15

using record management services, (P) *RMS Ref*, A-3

File protection, (G) *User*, 4-16, 6-16; (G) *SW Overview*, 3-14; (S) *Security*, 4-7, 5-8, 8-16; (S) *Sys Mgr Essentials*, 9-4; (P) *Rec Mgmt Util*, 4-22; (P) *File Appl*, 4-32

See also Protection

auditing, (S) *Security*, 10-5

C2 systems, (S) *Security*, C-5

changing default for volume, (G) *DCL N-Z*, DCLII-235

changing default with F\$ENVIRONMENT

lexical function, (G) *User*, 17-5

confidential files, (G) *User*, 19-12

DCL commands for, (S) *Security*, 8-25

default, (S) *Sys Mgr Essentials*, 9-6, 9-7

defining at file creation, (G) *DCL A-M*, DCLI-89

defining default, (G) *DCL A-M*, DCLI-251

directory file, (S) *Sys Mgr Essentials*, 9-10

establishing default, (G) *DCL N-Z*, DCLII-193

ISO 9660-formatted media, (S) *Sys Mgr Essentials*, 8-17

modifying, (G) *DCL N-Z*, DCLII-190

required for proxy access, (G) *User*, 19-9

setting default ACLs, (S) *Security*, 4-19

SYSDUMP.DMP file, (S) *Sys Mgr Tuning*, 15-4

tape, (S) *Sys Mgr Essentials*, 9-12

tape file, (S) *Sys Mgr Essentials*, 9-4

tape files, (S) *Sys Mgr Essentials*, 9-6

with EXCHANGE/NETWORK command, (G) *DCL A-M*, DCLI-216

File protection for security, (S) *DECams*, 1-4
Files, (S) *DECams*, B-1 to B-6; (P) *File Appl*, 1-1

See also Files-11 On-Disk Structure, Directory files, Initialization files, Log files, Parameter files, and Source files

access control through ACLs, (S) *Security*, 4-19

accessing

on a private device, (G) *User*, 12-8

on volume sets, (G) *User*, 12-8

accessing allocated disk blocks, (S) *Security*, 5-13

accessing at file level, (S) *Sys Mgr Essentials*, 9-13

accessing by file identifier, (S) *Security*, 5-9

access requirements, (S) *Security*, 5-8, 5-9

adding ACEs for security auditing, (G) *User*, 19-12; (S) *Security*, 3-17, 4-30

AGEN\$FEEDBACK.DAT, (S) *Sys Mgmt Util A-L*, 6-5

AGEN\$FEEDBACK.EXE, (S) *Sys Mgmt Util A-L*, 6-5

AGEN\$INCLUDE_PARAMS files, (S) *VMScluster Sys*, 8-11, 8-36

AGEN\$PARAMS.REPORT, (S) *Sys Mgmt Util A-L*, 6-7

aligning, (P) *File Appl*, 3-16

allocating headers, (G) *DCL A-M*, DCLI-252

ALPHAVMSSYS.OLD, (S) *Sys Mgmt Util A-L*, 6-7

ALPHAVMSSYS.PAR, (S) *Sys Mgmt Util A-L*, 6-7

analysis, (P) *Rec Mgmt Util*, 1-9

analyzing remote file structure, (S) *DECnet Intro*, 2-8

analyzing structure interactively, (P) *Rec Mgmt Util*, 1-1

appending, (G) *DCL A-M*, DCLI-35

applying an alarm to, (G) *User*, 19-12; (S) *Security*, 3-17

as protected objects, (S) *Security*, 4-10

assigning an alias, (S) *Sys Mgr Essentials*, 9-10

assigning protection codes, (S) *Security*, 5-10

assigning security profiles, (S) *Security*, 5-9, 5-10, 8-16

attributes, (P) *Concepts*, 8-1

accessing, (S) *Sys Mgr Essentials*, 9-17

altering over the network, (S) *DECnet Intro*, 2-9

auditing access, (G) *User*, 19-10, 19-12; (S) *Security*, 3-17, 4-29

AUTOGEN.PAR, (S) *Sys Mgmt Util A-L*, 6-6, 6-7; (S) *Sys Mgmt Util M-Z*, 5-32, 5-33

backing up, (S) *Sys Mgr Essentials*, 10-23

backing up to remote node, (S) *DECnet Intro*, 2-9

batch jobs

Files

batch jobs (cont'd)
 deleting after processing, (G) *DCL N-Z*,
 DCLII-407
changing security profiles, (S) *Security*, 5-11
characteristics argument for FAB, (P) *RMS*
 Ref, 1-4
closing, (G) *DCL A-M*, DCLI-58
closing from command procedures, (G) *User*,
 15-17
closing of queue database, (G) *DCL N-Z*,
 DCLII-393
cluster-accessible, (S) *VMScluster Sys*, 6-1
comparing, (G) *DCL A-M*, DCLI-151
comparing remote files, (S) *DECnet Intro*, 2-7
comparing with BACKUP, (S) *Sys Mgr*
 Essentials, 10-25
complete access, (P) *Concepts*, 8-2
compressed, (S) *TCP/IP*, 3-4
compressing, (P) *Util Routines*, DCX-1
concatenating, (G) *User*, 4-12; (G) *DCL A-M*,
 DCLI-78
confidential, protecting, (S) *Security*, 3-18
container systems, (G) *SW Overview*, 5-10
containing AUTOGEN feedback, (S) *Sys Mgmt*
 Util A-L, 6-5
containing list of known images, (S) *Sys Mgmt*
 Util A-L, 6-7
contiguity, (P) *File Appl*, 3-4, 3-25
controlling access over the network, (S)
 DECnet Intro, 2-6
controlling access to, (S) *Sys Mgmt Util A-L*,
 1-11, 1-13
controlling access with Identifier ACEs, (S)
 Security, 4-17
controlling the number of versions, (G) *User*,
 4-5
copying, (G) *User*, 4-12; (G) *DCL A-M*,
 DCLI-78, DCLI-213; (S) *Sys Mgr*
 Essentials, 9-18, 9-19
 between nodes, (G) *User*, 4-12
 from disk to standard-labeled volumes, (S)
 Sys Mgr Essentials, 9-20
 from local to remote node, (S) *DECnet*
 Intro, 3-30
 from remote account, (G) *User*, 19-9; (S)
 Security, 3-16
 remote, (S) *DECnet Intro*, 2-5
 remotely, (S) *Sys Mgr Tuning*, 21-14
 to tape, (S) *Sys Mgr Essentials*, 9-21
 to tape volumes, (S) *Sys Mgr Essentials*,
 9-21
 using Mail, (G) *User*, 4-13
copying remote, (S) *TCP/IP*, 3-4
copying with BACKUP, (S) *Sys Mgr Essentials*,
 10-23

Files (cont'd)

creating, (G) *User*, 4-11; (G) *DCL A-M*,
 DCLI-78, DCLI-88, DCLI-213; (S) *Sys*
 Mgr Essentials, 8-3; (P) *Rec Mgmt Util*,
 6-1
 at a remote node, (S) *DECnet Intro*, 2-7
 dependency on directory ownership, (S)
 Security, 8-16; (S) *Sys Mgmt Util A-L*,
 1-9
 FDL, (P) *Rec Mgmt Util*, 1-9
 from Mail messages, (G) *User*, 6-10
 in a directory with a Default Protection
 ACE, (S) *Sys Mgmt Util A-L*, 1-11
 owner UIC, (G) *DCL A-M*, DCLI-89
 requirements for, (S) *Security*, 5-9
 with COPY command, (G) *User*, 4-12
 with CREATE command, (G) *User*, 4-11
 with EDT editor, (G) *DCL A-M*, DCLI-192
 with TECO editor, (G) *DCL A-M*,
 DCLI-198
DCL commands for, (G) *SW Overview*, 5-9,
 5-10
deassigning logical names, (G) *DCL A-M*,
 DCLI-58
deciding when to use security auditing, (G)
 User, 19-12
default access control, (S) *DECnet Mgmt*, 1-20
default extension size on disk, (G) *DCL A-M*,
 DCLI-251
default parameter, (S) *Sys Mgmt Util A-L*, 6-7
default protection, (S) *Security*, 4-27
definition, (G) *User*, 4-1
defragmenting, (G) *SW Overview*, 7-7
deleting, (G) *User*, 4-15; (G) *DCL A-M*,
 DCLI-131
deleting from within command procedures, (G)
 User, 15-17
deleting remote, (S) *DECnet Intro*, 2-7
detected bad block (DBBF), (S) *Sys Mgr*
 Essentials, 8-65
device driver, (S) *Sys Mgmt Util M-Z*, 5-15
discrete records access, (P) *Concepts*, 8-2
displaying
 allocated blocks, (G) *DCL A-M*, DCLI-169
 at terminal, (G) *DCL N-Z*, DCLII-418
 backup date, (G) *DCL A-M*, DCLI-163
 backup time, (G) *DCL A-M*, DCLI-169
 blocks used, (G) *DCL A-M*, DCLI-169
 contents, (G) *User*, 4-14, 4-15
 contents over the network, (S) *DECnet*
 Intro, 2-6
 creation date, (G) *DCL A-M*, DCLI-163
 creation time, (G) *DCL A-M*, DCLI-169
 expiration date, (G) *DCL A-M*, DCLI-163
 expiration time, (G) *DCL A-M*, DCLI-169
 files opened by the system, (G) *DCL N-Z*,
 DCLII-265
 help, (G) *DCL A-M*, DCLI-231

Files

displaying (cont'd)

- latest version, (G) *DCL A-M*, DCLI-170
- list of remote files, (S) *DECnet Intro*, 2-5
- modification date, (G) *DCL A-M*, DCLI-163
- modification time, (G) *DCL A-M*, DCLI-169
- names of installed files, (G) *DCL N-Z*, DCLII-262, DCLII-265
- names of open files, (G) *DCL N-Z*, DCLII-262
- on current output device, (G) *DCL N-Z*, DCLII-418
- ownership, (S) *Sys Mgr Essentials*, 9-7
- owner UIC, (G) *DCL A-M*, DCLI-165
- protection, (G) *DCL A-M*, DCLI-167
- structures, (P) *Rec Mgmt Util*, 1-16 to 1-23
- using wildcard characters, (G) *User*, 4-14
- downloading, (S) *TCP/IP*, 3-3, 3-4
- dumping, (G) *DCL A-M*, DCLI-182
- dumping remote, (S) *DECnet Intro*, 2-9
- editing
 - with EDT editor, (G) *DCL A-M*, DCLI-192
 - with SUMSLP editor, (G) *DCL A-M*, DCLI-197
 - with TECO editor, (G) *DCL A-M*, DCLI-198
- editing at a remote node, (S) *DECnet Intro*, 2-7
- encrypting, (S) *Security*, 8-27
- erasing data from disks, (S) *Security*, 5-12
- events audited, (S) *Security*, 5-11
- examining remote, (S) *DECnet Intro*, 2-8
- exceptions to ownership rules, (S) *Security*, 4-7
- expanding, (P) *Util Routines*, DCX-8
- expiration dates on, (S) *Sys Mgr Essentials*, 8-54
- FDL, (P) *Rec Mgmt Util*, 5-3, 6-3; (P) *File Appl*, 4-2, 4-15, 10-1, 10-22
- for AUTOGEN feedback, (S) *Sys Mgr Tuning*, 14-11
- format, (S) *TCP/IP*, 5-5
- format required by ACL editor, (S) *Sys Mgmt Util A-L*, 1-4
- formatting text
 - See DSR
- for paging, (S) *Sys Mgmt Util A-L*, 6-7
- for swapping, (S) *Sys Mgmt Util A-L*, 6-7
- for system crash dumps, (S) *Sys Mgmt Util A-L*, 6-7
- fragmentation, (S) *Sys Mgr Essentials*, 10-48
- getting information asynchronously, (P) *Sys Svc II*, SYS2-3
- getting information synchronously, (P) *Sys Svc II*, SYS2-46

Files (cont'd)

- how Convert utility processes, (P) *Rec Mgmt Util*, 2-9
- I/O driver, (S) *Sys Mgmt Util M-Z*, 5-14
- ignoring characters, strings, or records in comparisons, (G) *DCL A-M*, DCLI-154
- initial allocation, (P) *File Appl*, 3-4
- initialization, (G) *User*, 6-21
- input of device list, (S) *Sys Mgmt Util M-Z*, 5-7
- internal structure, (P) *Rec Mgmt Util*, 1-1; (P) *File Appl*, 10-1
- length, (S) *TCP/IP*, 5-5
- limiting number of versions, (S) *Sys Mgr Essentials*, 8-53
- list in directory, (G) *DCL A-M*, DCLI-161
- locking in a VMScluster, (P) *File Appl*, 3-33
- logging activity during installation, (S) *Sys Mgr Essentials*, 3-17
- logical name in specification, (S) *DECnet Mgmt*, 1-24
- MAIL.MAI, (G) *User*, 6-12
- mailing
 - from DCL level, (G) *User*, 6-9
 - using Mail utility, (G) *User*, 6-8
- managing directory defaults, (S) *Security*, 8-22
- manipulation over the network, (S) *DECnet Mgmt*, 1-17
- mapping, (P) *Concepts*, 8-4
- maximum number on disk, (G) *DCL A-M*, DCLI-253
- merging remote, (S) *DECnet Intro*, 2-7
- modifying, (G) *User*, 4-11
- modifying characteristics, (G) *DCL N-Z*, DCLII-143; (S) *Sys Mgr Essentials*, 9-8, 9-10
- modifying queue entries for, (G) *DCL N-Z*, DCLII-133
- modifying RMS defaults for file operations, (G) *DCL N-Z*, DCLII-209
- naming rules, (S) *Security*, 5-8
- NETPROXY.DAT, (S) *DECnet Intro*, 3-35
- NETSERVER.LOG, (S) *DECnet Intro*, 4-11, 4-15
- nonstandard format
 - DCL commands with, (S) *Sys Mgr Essentials*, 9-2, 9-13
- on public volumes, (S) *Sys Mgr Essentials*, 8-8
- open during backup, (S) *Sys Mgr Essentials*, 10-30, 10-63
- opening, (G) *User*, 13-2; (G) *DCL N-Z*, DCLII-6; (P) *Concepts*, 19-14, 20-14
- OpenVMS, (G) *SW Overview*, 5-9
- optimizing, (G) *SW Overview*, 7-6
- optimizing security, (S) *Security*, 5-13
- output cluster report, (S) *Sys Mgmt Util M-Z*, 4-8, 4-55
- overwriting, (S) *Sys Mgr Essentials*, 9-14

Files (cont'd)

owned by resource identifier, (S) *Security*, 5-10, 5-11, 8-21

ownership rules, (S) *Security*, 5-10

parameter, (S) *Sys Mgmt Util A-L*, 6-5, 6-7; (S) *Sys Mgmt Util M-Z*, 5-33

PARAMS.DAT, (S) *Sys Mgmt Util A-L*, 6-6

PCF, (S) *Sys Mgr Essentials*, 3-22

POSIX, (G) *SW Overview*, 5-9, 5-10

POSIX commands for, (G) *SW Overview*, 5-11

POSIX utilities for, (G) *SW Overview*, 5-11

printing, (G) *User*, 4-16; (G) *DCL N-Z*, DCLII-13

printing from a private volume, (G) *User*, 12-2

printing remote, (S) *DECnet Intro*, 2-6

private volumes, (S) *Sys Mgr Essentials*, 8-9

privileges, (S) *Sys Mgr Essentials*, 9-4

Prolog 3 indexed files, (P) *Util Routines*, CONV-1, CONV-16

protecting, (G) *User*, 4-16

protecting data after deletion, (S) *Security*, 5-12

protecting mail, (S) *Security*, 5-13

protection required for proxy access, (S) *Security*, 3-16

public, (S) *Sys Mgr Essentials*, 8-8

purging, (G) *User*, 4-15; (G) *DCL N-Z*, DCLII-26

purging remote, (S) *DECnet Intro*, 2-7

purging to save disk space, (S) *Sys Mgr Essentials*, 8-53

queue and journal, (G) *DCL N-Z*, DCLII-378

queuing for printing at remote node, (S) *DECnet Intro*, 2-6

reading records from, (G) *DCL N-Z*, DCLII-30

record-by-record access, (P) *Concepts*, 8-2

recovering lost, (S) *Sys Mgr Essentials*, 8-57; (S) *Sys Mgmt Util A-L*, 3-4

remote access, (S) *Sys Mgr Tuning*, 21-14; (S) *TCP/IP*, 3-3

renaming, (G) *User*, 4-13; (G) *DCL N-Z*, DCLII-37

reorganizing, (P) *Rec Mgmt Util*, 3-1

reserved, (S) *Sys Mgr Tuning*, A-4

list of, (S) *Sys Mgr Essentials*, 8-4; (P) *File Appl*, 1-6

restoring default security elements, (S) *Security*, 4-23

restoring default security profiles, (S) *Security*, 4-27

restoring from image backup, (S) *Sys Mgr Essentials*, 10-42

restoring from incremental backup, (S) *Sys Mgr Essentials*, 10-44

restoring from remote node, (S) *DECnet Intro*, 2-9

restoring to original directories, (S) *Sys Mgmt Util A-L*, 7-9

Files (cont'd)

restoring with BACKUP, (S) *Sys Mgr Essentials*, 10-28

restricted access to, (G) *DCL N-Z*, DCLII-231

retrieving information from, (S) *Sys Mgr Essentials*, 9-2

RMS, (G) *SW Overview*, 4-18; (S) *TCP/IP*, 5-5

searching for character string, (G) *DCL N-Z*, DCLII-74

searching remote, (S) *DECnet Intro*, 2-7

security

using protection codes, (S) *Sys Mgr Essentials*, 9-6

security auditing and, (S) *Security*, 3-17, 5-11

security elements of, (S) *Security*, 5-8

sequential, (P) *Concepts*, 8-12

sequential and indexed access, (P) *Concepts*, 8-2

SETPARAMS.DAT, (S) *Sys Mgmt Util A-L*, 6-7

setting default protection and ownership, (S) *Security*, 8-16

sharing, (G) *SW Overview*, 1-7

sharing and exchanging in network environment, (S) *Security*, 12-19, 12-23

sharing for a cluster system, (S) *Security*, 11-5

SHOW_CLUSTER.LIS, (S) *Sys Mgmt Util M-Z*, 4-8, 4-55

sorting remote, (S) *DECnet Intro*, 2-7

specification argument for FAB, (P) *RMS Ref*, 1-4

specifying one or many, (P) *File Appl*, 5-16

specifying on non OpenVMS systems, (S) *TCP/IP*, 5-6

specifying OpenVMS, (G) *SW Overview*, 5-9

specifying paths using file specification string, (P) *RMS Ref*, A-20

specifying POSIX, (G) *SW Overview*, 5-10

specifying remote, (S) *TCP/IP*, 5-6

specifying remote VMScluster, (S) *DECnet Intro*, 2-2

specifying wildcard characters, (G) *User*, 4-9

startup, (S) *Sys Mgmt Util M-Z*, 6-65

disabling, (S) *Sys Mgmt Util M-Z*, 6-67

displaying, (S) *Sys Mgmt Util M-Z*, 6-73

startup command procedure, (S) *Sys Mgmt Util M-Z*, 5-17, 5-29, 5-33

structures, (P) *Rec Mgmt Util*, 1-9

SYSGEN session output, (S) *Sys Mgmt Util M-Z*, 5-4, 5-16

SYSGTTSTR.MSG, (S) *Sys Mgmt Util M-Z*, 5-31

SYSMAN.LIS, (S) *Sys Mgmt Util M-Z*, 6-13, 6-17, 6-18, 6-29, 6-30, 6-31, 6-48, 6-74

system parameter, (S) *Sys Mgmt Util M-Z*, 5-32, 5-33

tape volumes, (S) *Sys Mgr Essentials*, 9-5

Files

- tape volumes (cont'd)
 - writing to files on, (S) *Sys Mgr Essentials*, 9-18
 - temporary, (P) *Rec Mgmt Util*, 2-18, 4-19
 - text editor, (G) *SW Overview*, 5-12
 - transactions with remote, (S) *TCP/IP*, 5-5
 - transferring, (G) *DCL A-M*, DCLI-213; (G) *SW Overview*, 5-11, 6-4
 - transferring across network, (S) *Sys Mgr Essentials*, 9-24
 - using COPY, (S) *Sys Mgr Tuning*, 21-14
 - transferring remote, (S) *TCP/IP*, 3-3
 - transferring to and from remote node, (P) *Rec Mgmt Util*, 2-4
 - transfers over the network, (S) *DECnet Intro*, 2-5
 - transfers with MAIL, (S) *Security*, 12-19
 - truncating, (P) *File Appl*, 3-9
 - UIC-based protection
 - propagating in a directory tree, (S) *Sys Mgmt Util A-L*, 1-11
 - UNIX, (S) *TCP/IP*, 5-5, 5-6
 - updating with SUMSLP editor, (G) *DCL A-M*, DCLI-197
 - used by AUTOGEN command procedure, (S) *Sys Mgmt Util A-L*, 6-9
 - using F\$SEARCH lexical function to locate, (G) *User*, 17-10
 - using the /VERSION_LIMIT qualifier, (G) *User*, 4-5
 - utilities for, (G) *SW Overview*, 5-10
 - VAXVMSSYS.OLD, (S) *Sys Mgmt Util A-L*, 6-7
 - VAXVMSSYS.PAR, (S) *Sys Mgmt Util A-L*, 6-7; (S) *Sys Mgmt Util M-Z*, 5-33
 - version limit
 - defining at directory creation, (G) *DCL A-M*, DCLI-92
 - version numbers, (G) *User*, 4-2, 4-5
 - versions
 - limiting number of, (S) *Sys Mgr Essentials*, 8-53, 9-12
 - VMSIMAGES.DAT, (S) *Sys Mgmt Util A-L*, 6-7
 - VMSMAIL_PROFILE.DATA, (S) *Sys Mgr Essentials*, 6-38
 - volume configurations, (P) *File Appl*, 1-22
 - writing alarm messages to audit logs, (S) *Sys Mgmt Util A-L*, 1-8
 - writing records to, (G) *DCL N-Z*, DCLII-428
- Files-11 C disk structures
 - volume and file structure for ISO 9660 CD-ROMs, (P) *File Appl*, 1-3
- Files-11 D disk structures
 - volume and file structure for High Sierra CD-ROMs, (P) *File Appl*, 1-3
- Files-11 disk structures, (P) *File Appl*, 1-6
 - file headers, (P) *File Appl*, 1-7
 - home block, (P) *File Appl*, 1-6
 - initializing disks, (G) *DCL A-M*, DCLI-248
 - levels compared, (P) *File Appl*, 1-8
 - On-Disk Structure Level 1 format, (G) *DCL A-M*, DCLI-248
 - reserved files, (P) *File Appl*, 1-6
- Files-11 On-Disk Structure, (G) *User*, 12-5
 - block
 - definition, (S) *Sys Mgr Tuning*, A-1
 - CD on OpenVMS, (S) *Sys Mgr Essentials*, 8-5
 - comparison of ODS Level 1 and Level 2, (S) *Sys Mgr Tuning*, A-10
 - creating structure, (S) *Sys Mgr Essentials*, 8-10
 - disk save set, (S) *Sys Mgr Essentials*, 10-7
 - file identification, (S) *Sys Mgr Tuning*, A-4
 - master file directory (MFD), (S) *Sys Mgr Tuning*, A-4
 - ODS Level 1, (S) *Sys Mgr Essentials*, 8-3
 - directory hierarchy, (S) *Sys Mgr Tuning*, A-4
 - ODS Level 2, (S) *Sys Mgr Essentials*, 8-3
 - assigning disk quotas, (S) *Sys Mgr Essentials*, 8-50
 - definition, (S) *Sys Mgr Essentials*, 8-4
 - directory hierarchy, (S) *Sys Mgr Tuning*, A-4
 - sector, (S) *Sys Mgr Tuning*, A-2
 - structure, (S) *Sys Mgr Essentials*, 8-3; (S) *Sys Mgr Tuning*, A-3
 - Level 1, (S) *Sys Mgr Essentials*, 9-19; (S) *Sys Mgr Tuning*, A-4
 - Level 2, (S) *Sys Mgr Essentials*, 9-19; (S) *Sys Mgr Tuning*, A-4
 - reserved files, (S) *Sys Mgr Essentials*, 8-4
 - terminology, (S) *Sys Mgr Tuning*, A-2
 - UIC, (S) *Sys Mgr Tuning*, A-4
 - using with Exchange utility (EXCHANGE) to transfer data, (S) *Sys Mgr Essentials*, 9-24
- Files-11 volumes
 - modifying characteristics of, (G) *DCL N-Z*, DCLII-235
- File section number field, (P) *File Appl*, 1-28
- File sections
 - defining in context of multiple volumes, (P) *RMS Ref*, RMS-58
- File sequence number field, (P) *File Appl*, 1-28
- File-set identifier field, (P) *File Appl*, 1-28
- File shareable images
 - analyzing, (G) *DCL A-M*, DCLI-21
- File sharing, (P) *File Appl*, 3-12, 9-6
 - by RMS, (P) *Concepts*, 17-12
 - compatibility with subsequent record access, (P) *File Appl*, 7-5 to 7-6
 - defaults, (P) *File Appl*, 7-5

File sharing (cont'd)

- features provided by RMS, (P) *RMS Ref*, 1-3
- interlocked interprocess, (P) *File Appl*, 7-2, 7-5 to 7-6
- multistreaming, (P) *File Appl*, 7-2, 7-4
- no-access function, (P) *File Appl*, 7-4
- options, (P) *File Appl*, 7-3 to 7-4
- user-interlocked interprocess, (P) *File Appl*, 7-2, 7-4, 7-6, 7-7

File shelving, (G) *SW Overview*, 2-14, 7-8

- File specifications, (S) *DECnet Intro*, 2-12; (S) *DECnet Mgmt*, 1-19; (P) *Rec Mgmt Util*, 2-5, 4-18; (P) *File Appl*, 1-26, 5-1 to 5-4
- access control string, (S) *DECnet Mgmt*, 1-20
- alternate form for magnetic tapes, (G) *User*, 4-11

ANSI, (S) *Sys Mgr Essentials*, 9-16

- applicable services and routines, (P) *File Appl*, 5-8 to 5-14

component descriptors, (P) *RMS Ref*, 5-2

default, (P) *File Appl*, 6-1 to 6-3, 9-6

default requirements, (P) *RMS Ref*, A-20

directory, (P) *File Appl*, 6-11 to 6-18

for installing images, (S) *Sys Mgr Tuning*, 16-16

for remote files, (S) *TCP/IP*, 5-6; (S) *DECnet Intro*, 2-2

how handled by Search service, (P) *RMS Ref*, A-20

in cluster, (S) *DECnet Intro*, 2-4

list of included fields, (G) *User*, 4-2

network information, (S) *DECnet Mgmt*, 1-20

networks, (G) *User*, 4-7

node names, (G) *User*, 4-6, 4-12

parsing, (P) *RMS Ref*, RMS-69; (P) *File Appl*, 5-7, 5-8, 6-4 to 6-11

parsing components of, (P) *Sys Svc I*, SYS1-291

preprocessing, (P) *File Appl*, 5-8

primary, (P) *File Appl*, 9-6

program supplied, (P) *File Appl*, 6-1 to 6-3

related, (P) *File Appl*, 6-1 to 6-3, 9-7

searching string for, (P) *Sys Svc I*, SYS1-291

string addresses, (P) *RMS Ref*, A-20

string sizes, (P) *RMS Ref*, A-20

using name block, (P) *File Appl*, 5-8

using search lists, (P) *File Appl*, 5-8 to 5-16

using SYS\$DISK, (P) *File Appl*, 6-2

using wildcard characters, (P) *File Appl*, 5-8 to 5-16

using with CONVERT routines, (P) *Util Routines*, CONV-10

File structures, (S) *Sys Mgr Essentials*, 8-3; (P) *Rec Mgmt Util*, 1-1; (P) *File Appl*, 10-11

File system

- ACP parameters, (S) *Alpha Perform*, 18-6
- cache

File system

cache (cont'd)

ACP/XQP parameters, (S) *Alpha Perform*, 11-8

adjusting, (S) *Alpha Perform*, 18-6

hit rate, (S) *Alpha Perform*, 11-7

miss rate, (S) *Alpha Perform*, 11-7

caching, (S) *Alpha Perform*, 14-3

high-water marking, (S) *Alpha Perform*, 4-2

I/O activity, (S) *Alpha Perform*, 11-7

File system (XQP) I/O activity, (S) *VAX Perform*, 3-35

File system ACP, (P) *I/O User*, 1-1

File system cache

adjusting, (S) *VAX Perform*, 5-14

monitoring statistics, (S) *Sys Mgmt Util M-Z*, 1-26

relationship of (ACP/XQP) to MONITOR

FILE_SYSTEM_CACHE statistics, (S)

VAX Perform, 3-36

File system requests

responding to, (G) *DCL N-Z*, DCLII-42

File systems

coordinating, (S) *VMScluster Sys*, 5-17

global symbols, (P) *Alpha SDA*, SDA-61

similarities on Alpha and VAX systems, (S) *Comparison*, 3-1

File tags, (P) *File Appl*, 4-19 to 4-20

creating, (P) *RMS Ref*, 10-10

requirement for, (P) *RMS Ref*, 10-10

using, (P) *RMS Ref*, 10-10

File terminators, (P) *Concepts*, 9-31

File Transfer, Access, and Management Services

See FTAM

File transfer protocol

See FTP

File transfers

DECnet network, (G) *Compatibility*, 2-1

TCP/IP network, (G) *Compatibility*, 2-2

with FAL, (G) *Compatibility*, 2-6; (S)

Comparison, 6-2

File tuning

See Tuning

File type field, (G) *User*, 4-2; (P) *File Appl*, 1-26

asterisk (*) wildcard character in, (G) *User*, 4-9

using a percent sign (%) wildcard character in, (G) *User*, 4-10

with null values, (G) *User*, 4-10

File types, (G) *User*, 4-2

changing, (G) *DCL N-Z*, DCLII-37

list of defaults, (G) *User*, 4-3, 4-4

on Alpha systems, (G) *Compatibility*, 4-7

rules for entering, (G) *User*, 4-2

specifying for ACL editor, (S) *Sys Mgmt Util A-L*, 1-4

- File version numbers
 - changing, (G) *DCL N-Z*, DCLII-37
 - using an asterisk (*) wildcard character in, (G) *User*, 4-9
- FileView
 - graphical interface, (G) *SW Overview*, 5-9
- File window mapping pointers
 - allocating, (S) *Sys Mgmt Util M-Z*, 2-39
- File windows
 - mapping pointer allocation, (G) *DCL A-M*, DCLI-256
 - mapping pointers for, (S) *Sys Mgr Essentials*, 8-24
 - specifying mapping pointers, (G) *DCL N-Z*, DCLII-237
- File work areas
 - See FWAs
- FILE_ID option, (P) *File Appl*, 4-35
- FILE_MONITORING attribute, (P) *Rec Mgmt Util*, 4-19; (P) *File Appl*, 3-29
- FILE_NAME option, (P) *File Appl*, 4-35
- file_protection data type, (P) *Interfaces*, B-7
- FILE_SYSTEM_CACHE class record
 - in Monitor utility, (S) *Sys Mgmt Util M-Z*, A-19
- Fill factor, (P) *Rec Mgmt Util*, 4-5, 4-27; (P) *File Appl*, 3-26
- Fill level
 - comparing primary key and alternate keys, (P) *RMS Ref*, 12-10
- FILLM process limit, (S) *Sys Mgr Essentials*, 6-43
 - value for efficient backups, (S) *Sys Mgr Essentials*, 10-10
- FILL_BUCKETS attribute, (P) *Rec Mgmt Util*, 4-10
- Filtering data, (S) *DECamds*, 5-5
 - at window level, (S) *DECamds*, 5-17
 - changing a filter category, (S) *DECamds*, 5-6
- Filters, (S) *VMScluster Sys*, F-33 to F-34; (S) *DECamds*, 2-7
 - changing severity values for events, (S) *DECamds*, 5-5, 5-8
 - HP 4972 LAN Protocol Analyzer, (S) *VMScluster Sys*, F-33
- FIMS (Forms Interface Management System), (G) *SW Overview*, 5-8, A-1
- Final handler, (P) *Debugger*, 13-13
- FINALLY exception, (P) *DECthreads*, 4-6, 4-10
- Find service, (P) *RMS Ref*, RMS-39; (P) *File Appl*, 8-1 to 8-3
 - capabilities, (P) *RMS Ref*, RMS-40
 - condition values, (P) *RMS Ref*, RMS-42
 - control block input fields, (P) *RMS Ref*, RMS-40
 - control block output fields, (P) *RMS Ref*, RMS-42
- Find service (cont'd)
 - effect on next-record position, (P) *File Appl*, 8-17
 - key matches and, (P) *File Appl*, 8-11
 - run-time options, (P) *File Appl*, 9-13 to 9-16
- finite routine, (P) *Portable Math*, DPML-33, B-7
- FIPS (Federal Information Processing Standards), (G) *SW Overview*, 2-2, A-1
- Fire protection, (S) *Dependable*, 5-5
- Firmware
 - LAN updates, (G) *V6.2 New Feat*, 6-13; (S) *Sys Mgr Tuning*, 22-14
- FIRST command, (P) *File Appl*, 10-11
- First-level trimming, (S) *Alpha Perform*, 6-12
 - See also Memory management
- First-time flags
 - testing and setting, (P) *Modular Proc*, 3-10
- Fixed control, (P) *Rec Mgmt Util*, 4-32, 4-33, 4-34
- FIXED format, (P) *Rec Mgmt Util*, 4-33
- Fixed length
 - returned to stack, (P) *Calling Std*, 2-8
- Fixed-length cells, (P) *File Appl*, 3-15
- Fixed-length control fields, (P) *File Appl*, 3-16
 - size option, (P) *File Appl*, 4-32
- Fixed-length descriptor, (P) *Calling Std*, 5-3
- Fixed-length records, (P) *Rec Mgmt Util*, 2-13, 2-17, 4-34; (P) *File Appl*, 1-29
- Fixed length strings, (P) *STR\$*, 2-1
- Fixed-size stack frames, (P) *Interfaces*, 2-5; (P) *Calling Std*, 3-9
- Fixed temporary locations, (P) *Calling Std*, 3-12
- Fixes, (S) *DECamds*, 4-1 to 4-6, Glossary-2
 - Fix menu, (S) *DECamds*, 2-8
 - options, (S) *DECamds*, 2-8
- Fix-ups
 - creation of, (P) *Linker*, 3-24
 - definition, (P) *Linker*, 1-3
- Flag pages, (S) *Sys Mgr Essentials*, 13-33
 - file, (S) *Sys Mgr Essentials*, 13-35
 - job, (S) *Sys Mgr Essentials*, 13-33
- Flags
 - See also Event flags
 - ACK transport datagram, (S) *VMScluster Sys*, F-26
 - AUTHORIZE datagram flag in CC header, (S) *VMScluster Sys*, F-25
 - datagram flags field, (S) *VMScluster Sys*, F-25
 - DATA transport datagram, (S) *VMScluster Sys*, F-26
 - in the CC datagram, (S) *VMScluster Sys*, F-25
 - login, (S) *Sys Mgmt Util A-L*, 5-11
 - reserved, (S) *VMScluster Sys*, F-25, F-26
 - REXMT datagram, (S) *VMScluster Sys*, F-26
 - RSVP datagram, (S) *VMScluster Sys*, F-26
 - SEQ datagram, (S) *VMScluster Sys*, F-26
 - TR/CC datagram, (S) *VMScluster Sys*, F-25

- Flag words
 - bit mask, (P) *Interfaces*, B-13
- FLG=CHG option, (P) *Rec Mgmt Util*, 4-25
- FLG=DUP option, (P) *Rec Mgmt Util*, 4-26
- FLG=NUL option, (P) *Rec Mgmt Util*, 4-28
- Floating address, (S) *Sys Mgmt Util M-Z*, D-1
- Floating point, (P) *MTH\$*, 1-4 to 1-8
 - checking, (P) *Sys Svc I*, SYS1-92
- Floating-point
 - overflow, (P) *Concepts*, 13-16
 - underflow, (P) *Concepts*, 13-17
- Floating-point control register, (P) *Alpha SDA*, SDA-15
- Floating-point emulation code
 - base address, (P) *VAX SDA*, SDA-18
- Floating-point enable, (P) *Alpha SDA*, SDA-15
- Floating-point number conversions, (P) *LIB\$*, CVT-3
- Floating-point numbers
 - complex, (P) *Interfaces*, B-3 to B-5
 - standard, (P) *Interfaces*, B-8 to B-10
- Floating-point registers, (P) *Alpha SDA*, SDA-15
 - usage, (P) *Interfaces*, 2-3; (P) *Calling Std*, 3-2
- floating_point data type, (P) *Interfaces*, B-8
- floor routine, (P) *Portable Math*, DPML-34, B-8
- Flow control, (P) *Calling Std*, 3-3
- Flushing messages to disk, (S) *Security*, 9-28
- Flush interval, (S) *Security*, 9-28
- Flush service, (P) *RMS Ref*, RMS-44 to RMS-45; (P) *File Appl*, 7-6, 8-5
 - condition values
 - See also Completion status codes
- /FMASK qualifier, (P) *Debugger*, 15-13
- fmod routine, (P) *Portable Math*, DPML-35, B-8
- FMS, (P) *SMG\$*, 1-3, 4-1
- FOLR (First Order Linear Recurrence)
 - definition, (P) *MTH\$*, 2-6
- FOLR routines, (P) *MTH\$*, MTH-190, MTH-194, MTH-198, MTH-202
 - error checking, (P) *MTH\$*, 2-6
 - naming conventions, (P) *MTH\$*, 2-6
- FONT command, (G) *DCL A-M*, DCLI-226; (G) *Compatibility*, A-1
- Fonts
 - for displayed text, customizing, (P) *Debugger*, 3-35
 - scalable, (G) *Compatibility*, 1-3
- /FORCE qualifier, (P) *Alpha SDA*, SDA-59
- Forcing an exit, (P) *Sys Svc I*, SYS1-305
- FOR command, (P) *Debugger*, 12-10
- Foreign commands, (P) *Concepts*, 6-3; (P) *Debugger*, 2-2
 - character limit, (G) *User*, 14-3, 14-5
 - use of dollar sign, (P) *Concepts*, 6-4
- Foreign devices, (P) *Concepts*, 9-5
- Foreign file specifications
 - on networks, (G) *User*, 4-8
- /FOREIGN qualifier
 - in Mount utility, (S) *Sys Mgmt Util M-Z*, 2-20
- Foreign terminals
 - definition, (P) *SMG\$*, 5-1
- Foreign volumes, (P) *Concepts*, 9-4, 9-6
 - See Volumes, foreign
 - mounting, (S) *Sys Mgmt Util M-Z*, 2-20
- FORMAT attribute, (P) *Rec Mgmt Util*, 4-33; (P) *File Appl*, 4-34
- FORMAT command, (P) *Alpha SDA*, SDA-53; (P) *VAX SDA*, SDA-29, SDA-60, SDA-68
- Format for SHOW CLUSTER
 - specifying processor types, (S) *Sys Mgmt Util M-Z*, 4-31
- Formats
 - CD-ROM on disc, (S) *Sys Mgr Essentials*, 8-4
 - converting software kits, (S) *Sys Mgr Essentials*, 3-33
 - for ANSI magnetic tape volumes, (P) *File Appl*, 1-18
 - High Sierra, (S) *Sys Mgr Essentials*, 8-4
 - Identifier ACE, (S) *Security*, 4-17
 - of hexadecimal dump, (P) *Rec Mgmt Util*, 1-18
 - protection code, (S) *Security*, 4-24
 - rights identifiers, (S) *Security*, 4-3
 - security-auditing ACE, (S) *Security*, 9-6
 - UIC (user identification code), (S) *Security*, 4-2
- Formatting
 - ACL entry, (P) *Sys Svc I*, SYS1-308
 - of DIFFERENCES output, (G) *DCL A-M*, DCLI-155
 - security audit messages, (P) *Sys Svc I*, SYS1-321
- Formatting volumes, (S) *Sys Mgr Essentials*, 8-11
- Form feeds
 - controlling page overflow with, (S) *Sys Mgr Essentials*, 13-44
 - inserting automatically in output jobs, (S) *Sys Mgr Essentials*, 13-19
 - terminal, (P) *I/O User*, 5-22
- Forms
 - assigning default for a queue, (S) *Sys Mgr Essentials*, 13-63
 - associating with jobs and queues, (S) *Sys Mgr Essentials*, 13-42
 - changing DEFAULT, (S) *Sys Mgr Essentials*, 13-63
 - commands used with, (S) *Sys Mgr Essentials*, 13-61
 - controlling line overflow with, (S) *Sys Mgr Essentials*, 13-42, 13-43
 - controlling page width, length and margin size with, (S) *Sys Mgr Essentials*, 13-42
 - controlling paper stock with, (S) *Sys Mgr Essentials*, 13-42
 - default, (S) *Sys Mgr Essentials*, 13-63

Forms (cont'd)

DEFAULT, (S) *Sys Mgr Essentials*, 13-63
defining, (S) *Sys Mgr Essentials*, 13-61
deleting, (S) *Sys Mgr Essentials*, 13-64
 problems, (S) *Sys Mgr Essentials*, 13-82
description, (S) *Sys Mgr Essentials*, 13-42
displaying
 defined forms, (S) *Sys Mgr Essentials*, 13-63
 forms assigned to queues, (S) *Sys Mgr Essentials*, 13-64
formatting jobs with, (S) *Sys Mgr Essentials*, 13-42
getting information asynchronously, (P) *Sys Svc II*, SYS2-3
getting information synchronously, (P) *Sys Svc II*, SYS2-6
mounting, (S) *Sys Mgr Essentials*, 13-64
preprinted
 aligning, (S) *Sys Mgr Essentials*, 13-75, 13-77
 procedure for using, (S) *Sys Mgr Essentials*, 13-43, 13-60
 specifying setup modules with, (S) *Sys Mgr Essentials*, 13-42
 specifying sheet-feed paper with, (S) *Sys Mgr Essentials*, 13-42
 standards, (G) *SW Overview*, A-3
Forms Interface Management System
 See FIMS
Forté, (G) *SW Overview*, 6-16; (P) *Environment*, 1-4, 1-5
Fortran, (G) *Compatibility*, 1-10; (P) *Environment*, 7-2, 7-6
 /CHECK qualifier, (G) *Compatibility*, 4-5
 data type declarations, (P) *Interfaces*, B-33
 DEC Fortran for OpenVMS Alpha, (G) *SW Overview*, 4-6
 DEC Fortran for OpenVMS VAX, (G) *SW Overview*, 4-6
 implementation table, (P) *Interfaces*, B-33
 LIB\$ESTABLISH, (G) *Compatibility*, 4-4
FORTRAN
 /BLAS qualifier, (P) *MTH\$*, 2-2
FORTRAN carriage control, (P) *Rec Mgmt Util*, 2-3, 4-32
 See also FAB\$V_FTN option
FORTRAN carriage control option
 list, (P) *RMS Ref*, 4-24
FORTUSER.COM command procedure, (G) *User*, C-19
FORWARD command
 in Mail, (G) *User*, 6-11
Forward indexing, (P) *MTH\$*, 2-6

FORWARDING_DELAY system parameter, (S) *VMScluster Sys*, 3-20
%FP built-in symbol, (P) *Debugger*, 8-22, B-4
FPCR symbol, (P) *Alpha SDA*, SDA-15
FPEMUL symbol, (P) *VAX SDA*, SDA-18
FP symbol, (P) *Alpha SDA*, SDA-15; (P) *VAX SDA*, SDA-18
fp_class routine, (P) *Portable Math*, DPML-36, B-8
Fragmentation, (S) *TCP/IP*, 2-5
Fragmented files, (P) *File Appl*, 3-4 to 3-8
Frame pointers, (P) *Alpha SDA*, SDA-15; (P) *VAX SDA*, SDA-18
Free bucket list, (P) *Rec Mgmt Util*, 3-1
FREEGOAL parameter, (S) *Alpha Perform*, 13-3
 page faulting, (S) *Alpha Perform*, 10-6
 setting, (S) *Alpha Perform*, 6-14
FREEGOAL system parameter
 page faulting, (S) *VAX Perform*, 3-24
FREELIM parameter, (S) *Alpha Perform*, 13-3
 page faulting, (S) *Alpha Perform*, 10-6
FREELIM system parameter
 page faulting, (S) *VAX Perform*, 3-24
Free List Fault Rate, (S) *Alpha Perform*, 10-4
Free page (FPG) wait state, (S) *Alpha Perform*, 9-4
Free page list, (S) *Alpha Perform*, 5-2
 displaying, (P) *VAX SDA*, SDA-131
 evaluating, (S) *VAX Perform*, 3-24; (S) *Alpha Perform*, 10-5
 limited free memory
 analyzing, (S) *VAX Perform*, 4-23; (S) *Alpha Perform*, 13-14
/FREE qualifier, (P) *Alpha SDA*, SDA-120; (P) *VAX SDA*, SDA-131, SDA-134
Free service, (P) *RMS Ref*, RMS-47; (P) *File Appl*, 8-5
 condition values, (P) *RMS Ref*, RMS-48
 control block input and output fields, (P) *RMS Ref*, RMS-48
Freeware disc, (G) *V6.2 New Feat*, 2-1
frexp routine, (P) *Portable Math*, DPML-37, B-8
Front-end
 processor failover, (S) *Dependable*, 8-52, 8-55
FSTERR report
 example, (S) *Sys Mgmt Util A-L*, 9-25
FTAM (File Transfer, Access, and Management Services), (G) *SW Overview*, 6-4
FTP (File Transfer Protocol), (S) *Sys Mgr Tuning*, 21-14; (S) *TCP/IP*, 2-5, 5-5
 anonymous, (S) *TCP/IP*, 3-3
 directory services, (S) *TCP/IP*, 5-8
 file services, (S) *TCP/IP*, 3-3
 servers, (S) *TCP/IP*, 3-4
ftp command, (S) *TCP/IP*, 3-3, 3-4
Full backup
 See Image backup

Full callable interface of DECTPU routines, (P) *Util Routines*, DECTPU-2, DECTPU-5

Full-checking multiprocessing synchronization images, (S) *Comparison*, 2-18

Full-duplex mode, (P) *I/O User*, 5-10

Full function, (P) *Calling Std*, 3-4

Full image map files
creating, (P) *Linker*, LINK-14

Full names, (G) *User*, 4-6
converting to string, (P) *Sys Svc I*, SYS1-228
definition, (S) *Sys Mgr Tuning*, 21-2
support, (G) *V6.2 New Feat*, 3-16

FULL prompt, (P) *Rec Mgmt Util*, 6-9

/FULL qualifier, (P) *Linker*, LINK-14
in Backup utility, (S) *Sys Mgmt Util A-L*, 7-32

Full-reentrancy, (P) *Modular Proc*, 3-15

Full report
example, (S) *Sys Mgmt Util A-L*, 9-21

Function codes, (P) *Concepts*, 9-10
See also I/O functions

IO\$_ACCESS, (P) *I/O User*, 1-25

IO\$_ACPCONTROL, (P) *I/O User*, 1-32, 3-12

IO\$_ADDSHAD, (P) *I/O User*, 7-4

IO\$_AVAILABLE, (P) *I/O User*, 2-35, 3-22, 7-6

IO\$_COPYSHAD, (P) *I/O User*, 7-5

IO\$_CREATE, (P) *I/O User*, 1-23

IO\$_CRESHAD, (P) *I/O User*, 7-3

IO\$_DEACCESS, (P) *I/O User*, 1-27

IO\$_DELETE, (P) *I/O User*, 1-28

IO\$_DSE, (P) *I/O User*, 3-22

IO\$_FORMAT, (P) *I/O User*, 2-34

IO\$_MODIFY, (P) *I/O User*, 1-27

IO\$_PACKACK, (P) *I/O User*, 2-35

IO\$_READLBLK, (P) *I/O User*, 2-32, 3-13, 4-5, 5-28, 9-25

IO\$_READPBLK, (P) *I/O User*, 2-32, 3-13, 4-5, 9-25

IO\$_READPROMPT, (P) *I/O User*, 5-28

IO\$_READVBLK, (P) *I/O User*, 2-32, 3-13, 4-5, 5-28, 9-25

IO\$_REMSHAD, (P) *I/O User*, 7-5

IO\$_REWIND, (P) *I/O User*, 3-16

IO\$_REWINDOFF, (P) *I/O User*, 3-18

IO\$_SEARCH, (P) *I/O User*, 2-34

IO\$_SEEK, (P) *I/O User*, 2-35

IO\$_SENSECHAR, (P) *I/O User*, 2-34, 5-77, 7-6

IO\$_SENSEMODE, (P) *I/O User*, 2-34, 3-18, 5-77, 9-47

IO\$_SETCHAR, (P) *I/O User*, 3-19, 5-40, 9-30

IO\$_SETMODE, (P) *I/O User*, 3-19, 5-40, 9-30

IO\$_SETPRFPATH, (P) *I/O User*, 2-36

IO\$_SKIPFILE, (P) *I/O User*, 3-16

IO\$_SKIPRECORD, (P) *I/O User*, 3-16

IO\$_UNLOAD, (P) *I/O User*, 2-35, 3-18

Function codes (cont'd)

IO\$_WRITECHECK, (P) *I/O User*, 2-35

IO\$_WRITELBLK, (P) *I/O User*, 2-33, 3-15, 4-9, 5-37, 9-27

IO\$_WRITEOF, (P) *I/O User*, 3-17

IO\$_WRITEPBLK, (P) *I/O User*, 2-33, 3-15, 4-9, 5-37, 9-27

IO\$_WRITEVBLK, (P) *I/O User*, 2-33, 3-15, 4-9, 5-37, 9-27

list of, (P) *I/O User*, A-1

Function keys, (G) *User*, 3-18; (S) *Sys Mgmt Util A-L*, 13-17

VT200 series terminals, (G) *User*, D-1

VT300 series terminals, (G) *User*, D-1

Function modifiers, (P) *Concepts*, 9-11
for LAN driver, (P) *I/O User*, 9-27

IO\$_M_ACCESS, (P) *I/O User*, 1-23, 1-25, 3-10

IO\$_M_ATTNAST, (P) *I/O User*, 9-42

IO\$_M_BRDCST, (P) *I/O User*, 5-49, 5-80

IO\$_M_BREAKTHRU, (P) *I/O User*, 5-11, 5-38

IO\$_M_CANCTRLO, (P) *I/O User*, 5-5, 5-38

IO\$_M_CREATE, (P) *I/O User*, 1-23, 1-25, 3-10

IO\$_M_CTRL, (P) *I/O User*, 9-42, 9-47

IO\$_M_CTRLCAST, (P) *I/O User*, 5-44

IO\$_M_CTRLYAST, (P) *I/O User*, 5-5, 5-44

IO\$_M_CVTLOW, (P) *I/O User*, 5-29

IO\$_M_DATACHECK, (P) *I/O User*, 2-12, 2-32, 2-33, 3-6, 3-14, 3-15

IO\$_M_DELDATA, (P) *I/O User*, 2-33

IO\$_M_DELETE, (P) *I/O User*, 1-23, 1-29

IO\$_M_DMOUNT, (P) *I/O User*, 1-32

IO\$_M_DSABLMBX, (P) *I/O User*, 5-29

IO\$_M_ENABLMBX, (P) *I/O User*, 5-38

IO\$_M_ERASE, (P) *I/O User*, 2-30, 2-33, 3-15

IO\$_M_ESCAPE, (P) *I/O User*, 5-7, 5-29

IO\$_M_EXTEND, (P) *I/O User*, 5-29, 5-31

IO\$_M_HANGUP, (P) *I/O User*, 5-44

IO\$_M_INCLUDE, (P) *I/O User*, 5-45, 5-48

IO\$_M_INHERLOG, (P) *Concepts*, 9-5

IO\$_M_INHEXTGAP, (P) *I/O User*, 3-7

IO\$_M_INHRETRY, (P) *I/O User*, 2-32, 3-7

IO\$_M_MAINT, (P) *I/O User*, 5-45, 5-47

IO\$_M_NOECHO, (P) *I/O User*, 5-11, 5-26, 5-29

IO\$_M_NOFILTR, (P) *I/O User*, 5-29

IO\$_M_NOFORMAT, (P) *I/O User*, 5-11, 5-38

IO\$_M_NORSWAIT, (P) *I/O User*, 4-9, 4-11

IO\$_M_NOW, (P) *I/O User*, 4-5, 4-9, 4-11, 9-27

IO\$_M_NOWAIT, (P) *I/O User*, 3-16, 3-18

IO\$_M_OUTBAND, (P) *I/O User*, 5-48

IO\$_M_PURGE, (P) *I/O User*, 5-29

IO\$_M_RD_MODEM, (P) *I/O User*, 5-79

IO\$_M_READATTN, (P) *I/O User*, 4-11

IO\$_M_READERCHECK, (P) *I/O User*, 4-9, 4-11, 4-15

Function modifiers (cont'd)

- IO\$M_REFRESH, (P) *I/O User*, 5-38
 - IO\$M_RESPONSE, (P) *I/O User*, 9-29
 - IO\$M_REVERSE, (P) *I/O User*, 3-14
 - IO\$M_SETPROT, (P) *I/O User*, 4-14
 - IO\$M_SET_MODEM, (P) *I/O User*, 5-45
 - IO\$M_SHUTDOWN, (P) *I/O User*, 9-42
 - IO\$M_STREAM, (P) *I/O User*, 4-5
 - IO\$M_TIMED, (P) *I/O User*, 5-29
 - IO\$M_TRMNOECHO, (P) *I/O User*, 5-30
 - IO\$M_TT_ABORT, (P) *I/O User*, 5-48
 - IO\$M_TYPEAHCNT, (P) *I/O User*, 5-78
 - IO\$M_UNLOOP, (P) *I/O User*, 5-48
 - IO\$M_WRITERCHECK, (P) *I/O User*, 4-5, 4-15
 - list of, (P) *I/O User*, A-1
 - types of
 - IO\$M_DATACHECK, (P) *Concepts*, 9-11
 - IO\$M_INHRETRY, (P) *Concepts*, 9-11
- Function result, (P) *Calling Std*, 3-38
- Functions
- definition, (P) *Environment*, 10-1
- Function value returns, (P) *Calling Std*, 2-6 to 2-8, 3-53 to 3-54
- for RTL routines, (P) *Interfaces*, 3-6
 - returned in output argument, (P) *STR\$*, 2-6
 - returned in R0/R1, (P) *STR\$*, 2-6
- function_code data type, (P) *Interfaces*, B-10
- FWAs (file work areas), (P) *Alpha SDA*, SDA-75; (P) *VAX SDA*, SDA-80
- FYDRIVER
- installing, (G) *Compatibility*, A-2

G

- Gateways, (S) *TCP/IP*, 1-3, 1-7, 2-6; (S) *DECnet Intro*, 1-5, 1-6, 1-13
- DECnet/SNA, (S) *DECnet Intro*, 1-6, 1-13
- GBDs (global buffer descriptors)
- summary page, (P) *Alpha SDA*, SDA-75; (P) *VAX SDA*, SDA-80
- GBHs (global buffer headers), (P) *Alpha SDA*, SDA-75; (P) *VAX SDA*, SDA-80
- GBLPAGES system parameter, (S) *Sys Mgr Tuning*, 16-12; (S) *Alpha Perform*, 6-18; (P) *File Appl*, 1-38
- GBLPAGFIL system parameter, (P) *File Appl*, 1-38
- GBL program section attribute
- effect on image creation, (P) *Linker*, 3-9
 - implicit setting by linker, (P) *Linker*, 2-18
- GBLSECTIONS system parameter, (S) *Sys Mgr Tuning*, 16-12; (S) *Alpha Perform*, 6-18; (P) *File Appl*, 1-38
- GBSBs (global buffer synchronization blocks), (P) *Alpha SDA*, SDA-75; (P) *VAX SDA*, SDA-80
- GENCAT command, (G) *V6.2 New Feat*, 5-1
- General cancelability, (P) *DECthreads*, 2-15
- General identifiers, (S) *Security*, 4-17
- design considerations, (S) *Security*, 8-3
 - example, (G) *User*, 19-3; (S) *Security*, 4-5, 4-19
 - format, (S) *Security*, 4-3
- General users
- of network, (S) *DECnet Intro*, 2-1 to 2-11
- Generation version number, (P) *File Appl*, 1-28
- Generic device names, (G) *User*, 12-9
- Generic key match, (P) *File Appl*, 8-12
- Generic names
- showing, (S) *Sys Mgmt Util M-Z*, 5-23, 5-24
- Generic queues, (G) *DCL A-M*, DCLI-259; (G) *SW Overview*, 3-11, 7-6; (P) *Util Routines*, PSM-3
- batch, (S) *Sys Mgr Essentials*, 13-3
- recommended use, (S) *Sys Mgr Essentials*, 13-7
- clusterwide batch, (S) *VMScluster Sys*, 7-12
- clusterwide printer, (S) *VMScluster Sys*, 7-8
- creating, (S) *Sys Mgr Essentials*, 13-17
- description, (S) *Sys Mgr Essentials*, 13-2, 13-3
- establishing, (S) *VMScluster Sys*, 7-8
- in a VMScluster environment, (S) *Sys Mgr Essentials*, 13-2
- initializing, (G) *DCL A-M*, DCLI-266; (G) *DCL N-Z*, DCLII-371
- output, (S) *Sys Mgr Essentials*, 13-3, 13-11, 13-12
- recommended use, (S) *Sys Mgr Essentials*, 13-11
- relationship to execution queues, (S) *Sys Mgr Essentials*, 13-2
- specifying target execution queues, (S) *Sys Mgr Essentials*, 13-17
- starting, (G) *DCL A-M*, DCLI-260
- stopping, (G) *DCL A-M*, DCLI-260
- Generic SCSI class driver, (P) *I/O User*, 8-1 to 8-15
- assigning a channel to, (P) *I/O User*, 8-10
 - flow of, (P) *I/O User*, 8-4
 - I/O status block returned by, (P) *I/O User*, 8-10
 - loading, (P) *I/O User*, 8-8
 - obtaining device information from, (P) *I/O User*, 8-13
 - programming example, (P) *I/O User*, 8-14 to 8-15
 - \$QIO system service format for, (P) *I/O User*, 8-10 to 8-13
 - security considerations, (P) *I/O User*, 8-4
- Generic SCSI descriptor
- format of, (P) *I/O User*, 8-11 to 8-13

- GENFILES phase of AUTOGEN, (S) *Sys Mgmt Util A-L*, 6-7
- GENTRAP instruction, (P) *Calling Std*, 6-9
- GET attribute, (P) *Rec Mgmt Util*, 4-3, 4-35; (P) *File Appl*, 7-4, 7-21
- GETDATA phase of AUTOGEN, (S) *Sys Mgmt Util A-L*, 6-6
- \$GETDVI lexical function, (G) *User*, 17-10
- \$GET macro
 - program example, (P) *RMS Ref*, A-27
- Get option, (P) *Rec Mgmt Util*, 4-3, 4-35
 - See also FAB\$V_GET option
- GETPARMS.COM command procedure, (G) *User*, C-13
 - sample execution, (G) *User*, C-15
- Get Save Set
 - VMSINSTAL.COM option, (S) *Sys Mgr Essentials*, 3-15, 3-16
- Get service, (P) *RMS Ref*, RMS-49; (P) *File Appl*, 8-1, 8-2
 - applicable access modes, (P) *RMS Ref*, RMS-50
 - condition values, (P) *RMS Ref*, RMS-55
 - See also Completion status codes
 - control block input fields, (P) *RMS Ref*, RMS-52
 - control block output fields, (P) *RMS Ref*, RMS-55
 - current-record and, (P) *File Appl*, 8-16
 - effect on next-record position, (P) *File Appl*, 8-17
 - requirement for user record area, (P) *RMS Ref*, RMS-52
 - returning terminator character for terminal input, (P) *RMS Ref*, RMS-51
 - return status for various file access methods, (P) *RMS Ref*, RMS-7
 - run-time options, (P) *File Appl*, 9-13 to 9-16
 - using input from mailbox devices, (P) *RMS Ref*, RMS-51
 - using stream input, (P) *RMS Ref*, RMS-50
 - using terminal input, (P) *RMS Ref*, RMS-50
 - using the RAB\$L_STV field for additional status information, (P) *RMS Ref*, RMS-52
- \$GETSYI system service
 - determining host architecture, (G) *Compatibility*, 4-13
- Getting help, (S) *Sys Mgr Essentials*, 3-30
- GHRs (granularity hint regions), (G) *DCL N-Z*, DCLII-299
 - improving performance of images, (S) *Comparison*, 5-13
 - improving the performance of shareable images, (P) *Linker*, 1-16
- SHOW MEMORY/GH_REGIONS command, (S) *Comparison*, 5-15
- slicing shareable images, (S) *Sys Mgr Tuning*, 16-12
- GID (group identification), (S) *TCP/IP*, 4-1
- GIGAswitch device, (G) *SW Overview*, 6-8
- Givens plane rotation
 - applying to a vector, (P) *MTH\$*, MTH-173
 - generating the elements for, (P) *MTH\$*, MTH-178
- GKS, (G) *SW Overview*, 6-16; (P) *Environment*, 2-5, 2-7; (P) *SMG\$*, 1-3, 4-1
- Global buffer counts
 - example of run-time specification, (P) *File Appl*, 5-10 to 5-12
- Global buffer descriptors
 - See GBDs
- Global buffer headers
 - See GBHs
- Global buffers, (P) *RMS Ref*, 4-18; (P) *Rec Mgmt Util*, 4-19; (P) *File Appl*, 1-38, 3-12, 3-28, 7-19 to 7-21
 - See also Buffers
 - determining number of, (P) *RMS Ref*, 4-19
 - number, (P) *File Appl*, 7-16
 - performance, (P) *File Appl*, 9-8
 - with deferred-write option, (P) *File Appl*, 3-12
 - with shared sequential file, (P) *File Appl*, 3-15
- Global buffer sizes
 - establishing in shared sequential file operations, (P) *File Appl*, 3-15
 - for shared sequential file operations, (P) *RMS Ref*, 4-19, 6-7; (P) *File Appl*, 3-15, 7-21
- Global lock, (P) *DECthreads*, 3-4
 - using to avoid nonreentrant software, (P) *DECthreads*, 3-4
- Global mutex
 - locking, (P) *DECthreads*, cma-49
 - unlocking, (P) *DECthreads*, pthread-76, cma-76
- Global pages, (S) *Sys Mgr Tuning*, 16-12; (S) *Alpha Perform*, 6-15
 - table entry, (S) *Alpha Perform*, 6-18
- Global page tables, (P) *File Appl*, 1-38
 - displaying, (P) *Alpha SDA*, SDA-112; (P) *VAX SDA*, SDA-127
- /GLOBAL qualifier, (P) *Alpha SDA*, SDA-112; (P) *VAX SDA*, SDA-127
- Global sections, (S) *Sys Mgr Tuning*, 16-12; (P) *Concepts*, 17-8, 19-16, 20-16; (P) *Interfaces*, B-15; (P) *File Appl*, 1-38
 - characteristics, (P) *Concepts*, 19-16, 20-16
 - controlling access through access control lists, (P) *Util Routines*, ACL-1
 - creating, (P) *Sys Svc I*, SYS1-156
 - default protection, (S) *Security*, C-4
 - definition, (P) *Concepts*, 19-13, 20-13
 - deleting, (P) *Sys Svc I*, SYS1-204
 - descriptor, (S) *Alpha Perform*, 6-18
 - events audited, (S) *Security*, 5-15

Global sections (cont'd)

- for interprocess communication, (P) *Concepts*, 2-8
 - group, (S) *Security*, 4-10
 - linker-assigned names of, (P) *Linker*, 5-6
 - mapping, (P) *Concepts*, 19-19, 20-20; (P) *Sys Svc I*, SYS1-156; (P) *Sys Svc II*, SYS2-132
 - multiprocessing, (P) *Concepts*, 14-13
 - name, (P) *Concepts*, 19-17, 20-17
 - paging file, (P) *Concepts*, 19-20, 20-21
 - permanent, (P) *Concepts*, 17-12
 - privilege requirements, (S) *Security*, 5-15
 - reestablishing security profile, (S) *Security*, 5-16
 - restricting access, (S) *Security*, 5-15
 - security elements of, (S) *Security*, 5-14
 - system, (S) *Security*, 4-10
 - table entry, (S) *Alpha Perform*, 6-18
 - template profiles, (S) *Security*, 5-15
 - temporary, (P) *Concepts*, 17-12
 - types of access, (S) *Security*, 5-14
 - watchpoints, (P) *Debugger*, 14-16
 - writable, (P) *Concepts*, 14-13
- Global symbol directories
- See GSDs
- Global symbols, (G) *DCL A-M*, DCLI-1, DCLI-5; (P) *Concepts*, 17-4; (P) *Debugger*, 9-3, 9-10
- See also Message symbols
 - declaring as universal symbols, (P) *Linker*, 4-1
 - defining with the SYMBOL= option, (P) *Linker*, LINK-63
 - definition, (P) *Linker*, 2-1
 - determining the address of, (P) *Linker*, 3-18
 - implemented as overlaid program sections, (P) *Linker*, 2-1
 - including in a symbol table file, (P) *Linker*, LINK-64
 - object module reference specification record, (P) *Linker*, A-11
 - object module specification format, (P) *Linker*, B-23
 - version mask, (P) *Linker*, B-27
 - object module specification subrecord, (P) *Linker*, B-16
 - version mask, (P) *Linker*, B-27
 - resolving, (P) *Concepts*, 17-4
 - signaling with, (P) *Concepts*, 13-61
 - strong reference to, (P) *Linker*, 2-19
 - weak reference to, (P) *Linker*, 2-20
- Global symbol tables
- See GSTs
- Global Valid Fault Rate, (S) *Alpha Perform*, 10-4
- /GLOBAL_BUFFERS qualifier, (P) *File Appl*, 7-20

- GLOBAL_BUFFER_COUNT attribute, (P) *Rec Mgmt Util*, 4-19; (P) *File Appl*, 7-16, 7-20
- Go button, (P) *Debugger*, 1-8, 3-6
- GO command, (P) *Debugger*, 6-6
 - multiprocess program, (P) *Debugger*, 14-6
- G operator, (P) *Alpha SDA*, SDA-13; (P) *VAX SDA*, SDA-16
- Gopher service, (S) *TCP/IP*, 3-5
- GOSUB command, (G) *DCL A-M*, DCLI-227, DCLI-228
- GOTO command, (G) *DCL A-M*, DCLI-229, DCLI-230
- GOTO unwind operations, (P) *Concepts*, 13-49
 - nonlocal, (P) *Calling Std*, 6-21
- Granularity
 - of resources, (P) *Concepts*, 15-3
 - on Alpha systems, (P) *Concepts*, 14-3
 - on VAX systems, (P) *Concepts*, 14-3
- Granularity hint regions
- See GHRs
- Graphics
 - applications support for, (G) *SW Overview*, 6-16
 - standards, (G) *SW Overview*, A-3
- Graphics options, (P) *Environment*, 2-6
- Greenwich Mean Time (GMT), (P) *Concepts*, 5-34
- Grounding
 - SCSI requirements, (G) *V6.2 New Feat*, 7-20
 - troubleshooting, (G) *V6.2 New Feat*, 7-35
- Group logical name tables, (P) *Concepts*, 10-6
- See also Logical name tables
 - canceling entries, (G) *DCL A-M*, DCLI-107
 - including logical name, (G) *DCL A-M*, DCLI-41, DCLI-116
- Group numbers, (P) *Rec Mgmt Util*, 4-22
 - in UICs, (S) *Security*, 4-2
 - local area VMScluster, (S) *Sys Mgmt Util M-Z*, 6-15
 - modifying, (S) *Sys Mgr Tuning*, 20-16
 - reserved UICs, (S) *Security*, 4-2
 - uniqueness requirement for clustered systems, (S) *Security*, 11-5
- VMScluster
 - displaying, (S) *Sys Mgmt Util M-Z*, 6-17
- Group numbers and passwords, (S) *Security*, 11-7; (S) *VMScluster Sys*, 10-16
- See also Security management
 - asked for in CLUSTER_CONFIG.COM, (S) *VMScluster Sys*, 8-7
 - error example, (S) *VMScluster Sys*, 2-14
 - for LANs, (S) *VMScluster Sys*, 3-6
 - in DX header, (S) *VMScluster Sys*, F-23
 - purpose, (S) *VMScluster Sys*, 10-16
 - setting up, (S) *VMScluster Sys*, 2-14
 - use on a LAN, (S) *VMScluster Sys*, 2-14

GROUP privilege, (S) *Security*, A-6
 Group protection code, (P) *Rec Mgmt Util*, 4-22
 /GROUP qualifier, (S) *DECams*, 2-1
 in Mount utility, (S) *Sys Mgmt Util M-Z*, 2-21
 Groups, (S) *DECams*, 1-7, 2-3, Glossary-2
 access to service nodes, (S) *Sys Mgmt Util A-L*,
 13-33, 13-51
 access to services in LAT environment, (S) *Sys
 Mgmt Util A-L*, 13-29
 collapsing information, (S) *DECams*, 2-4
 collecting data, (S) *DECams*, 2-5
 expanding information, (S) *DECams*, 2-4
 how to assign a node, (S) *DECams*, 1-8
 Group users (security category), (S) *Security*, 4-8,
 4-24; (S) *Sys Mgr Essentials*, 11-8
 Group volumes
 definition, (S) *Sys Mgr Essentials*, 8-8
 /GROUP_SIZE qualifier
 in Backup utility, (S) *Sys Mgmt Util A-L*, 7-33
 GROWLIM system parameter
 page faulting, (S) *VAX Perform*, 2-8
 GRPNAM privilege, (S) *Security*, 5-16, A-7, C-5
 GRPPRV privilege, (S) *Security*, A-7
 effect on protection mechanisms, (S) *Security*,
 4-28
 giving rights of system user, (S) *Security*, 4-11,
 4-24; (S) *Sys Mgr Essentials*, 11-8
 granting control access, (S) *Security*, 4-28
 trusted users and, (S) *Security*, C-5
 GSDs (global symbol directories), (P) *Linker*, A-6
 to A-21, B-10 to B-27
 analyzing in object files, (G) *DCL A-M*,
 DCLI-27
 in object modules, (P) *Linker*, 2-1
 GSMATCH= option, (P) *Linker*, LINK-52
 /GST qualifier, (P) *Linker*, LINK-15
 creating run-time kits with, (P) *Linker*, 4-10
 GSTs (global symbol tables)
 analyzing, (G) *DCL A-M*, DCLI-22
 controlling contents of, (P) *Linker*, 4-10,
 LINK-15, LINK-66
 creating, (P) *Linker*, 4-8; (P) *Debugger*, 9-4
 definition, (P) *Linker*, 2-1
 deleting entries in, (P) *Linker*, 4-10
 deleting symbols from, (G) *DCL A-M*,
 DCLI-145
 entering symbol in, (G) *DCL A-M*, DCLI-274
 shareable image, (P) *Debugger*, 9-12
 G symbol, (P) *Alpha SDA*, SDA-15; (P) *VAX
 SDA*, SDA-18
 Guard pages, (P) *Calling Std*, 3-59
 Guard regions, (P) *Calling Std*, 3-59
 Guardsize attribute, (P) *DECthreads*, 2-7,
 pthread-11, cma-14, cma-20
 obtaining, (P) *DECthreads*, pthread-6
 Guidelines

Guidelines (cont'd)

 application development for mixed-architecture
 VMScluster systems, (G) *Compatibility*,
 4-15
 G_float floating-point data type, (G) *Compatibility*,
 1-12

H

H4000 transceiver, (S) *DECnet Intro*, 3-5
 h-addresses
 See Physical addresses
 Half-duplex mode, (P) *I/O User*, 5-10, 5-21
 See also Duplex mode
 Halting system
 waiting until after system dump file is written,
 (S) *Sys Mgr Tuning*, 15-2
 Handlers, (P) *Debugger*, 13-13
 change and compatibility modes, (P) *Concepts*,
 13-12
 declaring a condition handler, (P) *DECthreads*,
 B-1
 invoking during unwind, (P) *Calling Std*, 6-22
 Handles, (P) *DECthreads*, 2-3
 assigning to an object, (P) *DECthreads*, cma-42
 comparing, (P) *DECthreads*, cma-43
 copying, (P) *DECthreads*, cma-42
 obtaining for thread, (P) *DECthreads*, cma-68
 Hang conditions
 diagnosing, (S) *VMScluster Sys*, C-16
 Hanging cluster fix, (S) *DECams*, 4-2
 HANGUP characteristic
 application LAT devices, (S) *Sys Mgmt Util
 A-L*, 13-10
 Hangup function modifier
 terminal
 disconnecting a, (P) *I/O User*, 5-44
 interaction with, (P) *I/O User*, 5-18, 5-25
 Hardcopy output
 disposal of, (S) *Security*, 3-20
 security measures, (G) *User*, 2-26
 Hardcopy terminal
 logout considerations, (G) *User*, 2-26
 output, (P) *Rec Mgmt Util*, 6-9
 Hard fault rate, (S) *Alpha Perform*, 11-6
 Hard faults
 characterizing, (S) *VAX Perform*, 4-6
 Hard-positioning option, (P) *File Appl*, 4-35
 Hardware
 add-on SCSI adapters, (G) *V6.2 New Feat*, 7-9
 analyzing options, (S) *Dependable*, 3-3 to 3-5
 BA350/BA353 StorageWorks enclosures, (G)
 V6.2 New Feat, 7-9
 booting problem, (S) *Sys Mgr Essentials*, 4-16
 building block, (S) *Dependable*, 1-15 to 1-16
 connecting for communications, (S) *DECnet
 Intro*, 3-4

Hardware (cont'd)

- conventional Alpha and VAX systems, (S)
Dependable, 6-5
 - DWZZA converters, (G) *V6.2 New Feat*, 7-11
 - eliminating single points of failure, (S)
Dependable, 6-1
 - failures in, (S) *Dependable*, 9-10 to 9-13
 - fault tolerant VAXft systems, (S) *Dependable*,
6-8
 - HSZ40 controllers, (G) *V6.2 New Feat*, 7-13
 - importance of sufficient capacity for system
performance, (S) *Sys Mgr Tuning*, 16-6
 - in SCSI VMScluster systems, (G) *V6.2 New
Feat*, 7-9
 - installation requirements, (S) *DECamsd*, A-2
 - integral SCSI adapters, (G) *V6.2 New Feat*,
7-18
 - security triplet address, (S) *DECamsd*, 1-5
 - selecting new, (S) *Dependable*, 3-4
 - supported, (P) *I/O User*, 7-2
 - VMScluster topologies, (S) *Dependable*, 6-10
 - dependability characteristics summary, (S)
Dependable, 6-20
 - when to enlarge capacity, (S) *VAX Perform*,
5-13; (S) *Alpha Perform*, 18-5
- Hardware addresses
See Physical addresses
- Hardware configurations
standalone, (G) *SW Overview*, 1-7
VMScluster, (G) *SW Overview*, 1-8
- Hardware errors, (P) *File Appl*, 10-2
DECnet messages, (S) *DECnet Intro*, 3-31
- Hardware exceptions, (P) *Calling Std*, 6-1
definition, (P) *Calling Std*, 1-5
- Hardware loopback device, (S) *DECnet Mgmt*, 7-6
- Hardware registers
for Alpha systems, (P) *Interfaces*, 2-2
for VAX, (P) *Interfaces*, 2-1
- Hardware types
determining type using F\$GETSYI lexical
function, (S) *Comparison*, 2-7
- HDR1 labels
accessing from XAB\$B_MTACC field, (P) *RMS
Ref*, 13-4
- /HDR3 qualifier
in Mount utility, (S) *Sys Mgmt Util M-Z*, 2-21
- Header allocation
on disk volumes, (G) *DCL A-M*, DCLI-252
- Header files, (P) *DECthreads*, B-2
- Header labels, (P) *File Appl*, 1-20
- HDR1 label, (P) *File Appl*, 1-26, 1-28, 1-29
 - HDR2 label, (P) *File Appl*, 1-26, 1-29 to 1-31
 - HDR3 label, (P) *File Appl*, 1-26, 1-32
 - HDR4 label, (P) *File Appl*, 1-26, 1-32
- on tape files, (S) *Sys Mgr Essentials*, 8-7, 9-15
- reading attributes of, (S) *Sys Mgr Essentials*,
9-17

- /HEADER qualifier, (P) *Linker*, LINK-16;
(P) *Alpha SDA*, SDA-120; (P) *VAX SDA*,
SDA-134
- Header resident images, (S) *Sys Mgr Tuning*,
16-10, 16-12
- Headers
- CC, (S) *VMScluster Sys*, F-23
 - crash dump, (P) *Alpha SDA*, SDA-99
 - DX, (S) *VMScluster Sys*, F-22
 - Ethernet, (S) *VMScluster Sys*, F-21
 - FDDI, (S) *VMScluster Sys*, F-22
 - library, (P) *Util Routines*, LBR-23
 - library module, (P) *Util Routines*, LBR-22
 - TR, (S) *VMScluster Sys*, F-25
- Heap Analyzer, (G) *Compatibility*, 1-11
- Heap storage, (P) *STR\$*, 2-2
- HELLO datagram, (S) *VMScluster Sys*, F-17,
F-24
- congestion, (S) *VMScluster Sys*, G-2
- Hello timer, (S) *DECnet Mgmt*, 3-29
- HELLO_INTERVAL system parameter, (S)
VMScluster Sys, 3-20
- Help, (S) *DECamsd*, 2-1
- DCL, (G) *Compatibility*, 1-3
 - for commands, (G) *User*, 2-23
 - for system messages, (G) *User*, 2-23
 - messages, (G) *Compatibility*, 1-3
 - online, debugger, (P) *Debugger*, 1-15, 6-1
 - online for Analyze Audit, (S) *Sys Mgmt Util
A-L*, 4-27
- POLYCENTER Software Installation utility,
(S) *Sys Mgr Essentials*, 3-30, 3-35
- HELP command, (G) *User*, 2-21; (G) *DCL A-M*,
DCLI-231 to DCLI-238; (S) *DECnet Intro*,
3-33; (S) *DECnet Mgmt Util*, 3-42; (P) *File
Appl*, 10-11; (P) *Debugger*, 6-1; (P) *Alpha
SDA*, SDA-55; (P) *VAX SDA*, SDA-62
- in CLUE, (S) *Sys Mgmt Util A-L*, 8-8
 - in Install utility, (S) *Sys Mgmt Util A-L*, 11-11
 - in LANCP utility, (S) *Sys Mgmt Util A-L*,
12-16
 - in LATCP, (S) *Sys Mgmt Util A-L*, 13-22
 - in Mail, (G) *User*, 6-2
 - in Monitor utility, (S) *Sys Mgmt Util M-Z*, 1-7
 - in Show Cluster utility, (S) *Sys Mgmt Util
M-Z*, 4-36
 - in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-32
 - recording output, (P) *Alpha SDA*, SDA-70; (P)
VAX SDA, SDA-75
- Help desk
consulting service from Digital, (S) *Dependable*,
10-7
- Help display
of default libraries, (G) *DCL A-M*, DCLI-232
- Help facility, (S) *DECnet Mgmt Util*, 1-12
- Help files, (G) *DCL A-M*, DCLI-231

- Help libraries, (P) *Environment*, 8-4
 - creating, (G) *DCL A-M*, DCLI-231
 - decompressing, (S) *Alpha Perform*, 4-1
 - displaying text, (P) *Util Routines*, LBR-25
 - user, (G) *DCL A-M*, DCLI-235
- HELP/MESSAGE command, (G) *User*, 2-23; (G) *DCL A-M*, DCLI-239 to DCLI-244; (G) *Help Msg*, 2-4
 - in a command procedure, (G) *Help Msg*, 2-1
 - qualifiers, (G) *Help Msg*, 2-4
- Help Message utility (MSGHLP), (G) *Help Msg*, 2-1; (G) *SW Overview*, 5-4; (G) *Compatibility*, 1-3; (S) *Sys Mgr Essentials*, 5-25; (P) *Environment*, 4-2
 - accessing \$STATUS values for uninstalled messages, (S) *Sys Mgr Essentials*, 5-26
 - adding .MSGHLP\$DATA files to the database, (S) *Sys Mgr Essentials*, 5-28
 - at the user level, (G) *Help Msg*, 2-9
 - adding comments to the database, (S) *Sys Mgr Essentials*, 5-30
 - adding messages to the database
 - in user .MSGHLP\$DATA files, (G) *Help Msg*, 2-10
 - changing Digital-supplied data
 - general users, (G) *Help Msg*, 2-13
 - changing user-supplied text in the database, (G) *Help Msg*, 2-12
 - compressing the database after deletions, (G) *Help Msg*, 2-11
 - creating a .MSGHLP\$DATA file, (G) *Help Msg*, 2-10
 - creating a .MSGHLP file, (G) *Help Msg*, 2-8
 - customizing the database, (G) *Help Msg*, 2-8
 - using a process-level search path, (G) *Help Msg*, 2-9
 - default database, (G) *Help Msg*, 2-9
 - default operation, (G) *Help Msg*, 2-1
 - deleting messages from the database
 - Digital-supplied messages, (S) *Sys Mgr Essentials*, 5-29
 - user-supplied messages, (G) *Help Msg*, 2-11
 - facilities in the database, (G) *Help Msg*, 2-2
 - /FACILITY qualifier, (G) *Help Msg*, 2-7
 - features, (G) *Help Msg*, 2-1
 - HELP/MESSAGE command, (G) *Help Msg*, 2-4
 - invoking, (G) *User*, 2-23
 - /LIBRARY qualifier, (G) *Help Msg*, 2-9
 - matching exact words only, (G) *Help Msg*, 2-2
 - message section files
 - order searched, (S) *Sys Mgr Essentials*, 5-26
 - modifying the database
 - user-supplied data, (G) *Help Msg*, 2-10
 - search path of database files
 - as system default, (S) *Sys Mgr Essentials*, 5-28
- Help Message utility (MSGHLP)
 - search path of database files (cont'd)
 - in login file, (G) *Help Msg*, 2-9
 - specifying database files with /LIBRARY, (G) *Help Msg*, 2-9
 - system management tasks, (S) *Sys Mgr Essentials*, 5-25
- HELP parameter
 - use with LOOP CIRCUIT command, (S) *DECnet Mgmt*, 7-11
- HELP phase of AUTOGEN, (S) *Sys Mgmt Util A-L*, 6-8
- Help system, (G) *SW Overview*, 5-4
- Hexadecimal dump, (G) *DCL A-M*, DCLI-184; (P) *Rec Mgmt Util*, 1-18
- /HEXADECIMAL qualifier, (P) *Debugger*, 8-11
- Hexadecimal value of an expression, (P) *Alpha SDA*, SDA-45; (P) *VAX SDA*, SDA-53
- %HEX built-in symbol, (P) *Debugger*, 8-12, B-6
- Hex password, (S) *DECnet Mgmt Util*, 1-9
- Hibernation, (P) *Concepts*, 3-36
 - alternate method, (P) *Concepts*, 3-39
 - and AST, (P) *Concepts*, 4-6
 - compared with suspension, (P) *Concepts*, 3-37
 - LIB\$WAIT, (P) *LIB\$*, LIB-507
- Hidden attribute, (S) *Security*, 4-21
- Hide Nodes, (S) *DECamds*, 2-4
 - changing default behavior, (S) *DECamds*, 5-2
- Hierarchical Shelving Manager
 - See HSM
- Hierarchical Storage Controller devices
 - See HSC devices
- Hierarchical Storage Controller subsystems
 - See HSC subsystems
- Higher-level language statements, (S) *DECnet Mgmt*, 1-18
- High-level languages
 - argument evaluation, (P) *Calling Std*, 2-5
 - argument transmission, (P) *Calling Std*, 2-5
 - mapped into argument lists, (P) *Calling Std*, 2-5
- Highlighting
 - changing default behavior, (S) *DECamds*, 5-2
 - customizing color, (S) *DECamds*, 5-2
 - filter, (S) *DECamds*, 2-7
- Highly available computing, (S) *Dependable*, 1-1 to 1-3
- High Sierra format
 - definition, (S) *Sys Mgr Essentials*, 8-4
 - on CD-ROM, (S) *Sys Mgr Essentials*, 8-4
- High-speed terminal output, (P) *Rec Mgmt Util*, 6-9
- Highwater marking, (S) *Security*, 5-12, 8-28
 - C2 systems and, (S) *Security*, C-9
 - disabling, (S) *Alpha Perform*, 4-2
 - disabling for system performance, (S) *Sys Mgr Tuning*, 16-7

- Highwater marking (cont'd)
 - disabling to improve system performance, (S) *VAX Perform*, 1-10
 - performance and, (S) *Security*, 8-29
- Hints
 - calculating JSR hints, (P) *Linker*, B-41
- History of installed software, (S) *Sys Mgmt Util M-Z*, 3-20
- HLD (host loader), (S) *DECnet Mgmt*, 1-13, 2-25, 4-14
 - mapping table, (S) *DECnet Mgmt*, 4-16
- HLDTB\$ macro
 - mapping table, (S) *DECnet Mgmt*, 4-16
- HNODE\$ macro
 - target node, (S) *DECnet Mgmt*, 4-16
- Holder Hidden attribute, (S) *Security*, 8-9; (S) *Sys Mgmt Util A-L*, 5-21, 5-29, 5-37; (P) *Concepts*, 23-5
- Holder records, (P) *Concepts*, 23-8
 - adding, (P) *Concepts*, 23-12
 - adding to rights database, (P) *Sys Svc I*, SYS1-8
 - format, (P) *Concepts*, 23-9
 - modifying, (P) *Concepts*, 23-14
 - modifying in rights database, (P) *Sys Svc II*, SYS2-138
 - removing, (P) *Concepts*, 23-16
 - removing from rights database, (P) *Sys Svc II*, SYS2-204
- Holders of a rights identifier
 - associating with identifier, (S) *Security*, 8-7
 - displaying records, (S) *Security*, 8-6
 - finding, (P) *Sys Svc I*, SYS1-300
 - granting access to, (S) *Security*, 4-17
 - removing from rights database, (S) *Security*, 8-7
- Holding a job, (S) *Sys Mgr Essentials*, 13-71
- Holding job status, (S) *Sys Mgr Essentials*, 13-69, 13-79
- /HOLD qualifier, (P) *Debugger*, 14-3, 14-7, 16-16, 16-20, 16-24
- Home blocks, (S) *Sys Mgr Essentials*, 8-58; (S) *Sys Mgmt Util A-L*, 3-5; (P) *File Appl*, 1-6
 - erasing, (G) *V6.2 New Feat*, 3-22
 - in index file, (S) *Sys Mgr Tuning*, A-6
- /HOMEBLOCKS qualifier
 - in Analyze/Disk_Structure utility, (S) *Sys Mgmt Util A-L*, 3-8
- H operator, (P) *Alpha SDA*, SDA-13; (P) *VAX SDA*, SDA-16
- Hops, (S) *DECnet Intro*, 1-3
 - routing term, (S) *DECnet Mgmt*, 2-21
- Host-based RAID
 - support for, (G) *V6.2 New Feat*, 7-4
- Host-based shadowing
 - support for, (G) *V6.2 New Feat*, 7-4
- Host-based shadow set
 - mounting disks, (S) *Sys Mgr Essentials*, 10-42
- Host IDs
 - configuring for SCSI, (G) *V6.2 New Feat*, 7-20
- Host loader
 - See HLD
- Hosts, (S) *TCP/IP*, 1-2, 2-3
 - addresses, (S) *TCP/IP*, 2-6
 - checking availability of, (P) *Sys Svc I*, SYS1-329
 - in a VMScluster system, (G) *V6.2 New Feat*, 7-1
 - names, (S) *TCP/IP*, 2-6
- Host services
 - DECnet, (S) *DECnet Mgmt*, 1-2, 1-12, 4-1
- Hot plugging (SCSI devices), (G) *V6.2 New Feat*, 7-38
- Hot standby
 - in disaster tolerant configurations, (S) *Dependable*, 5-11
- HP 4972 LAN Protocol Analyzer
 - distributed enable messages, (S) *VMScluster Sys*, F-35
 - distributed trigger messages, (S) *VMScluster Sys*, F-35
 - Distrib_Enable filter, (S) *VMScluster Sys*, F-34
 - Distrib_Trigger filter, (S) *VMScluster Sys*, F-34
 - filters, (S) *VMScluster Sys*, F-33
 - LAVc_all filter, (S) *VMScluster Sys*, F-33
 - LAVc_TR_ReXMT filter, (S) *VMScluster Sys*, F-33
 - partner program, (S) *VMScluster Sys*, F-37
 - programming, (S) *VMScluster Sys*, F-36
 - scribe program, (S) *VMScluster Sys*, F-38
 - starter program, (S) *VMScluster Sys*, F-36
- HRD option, (P) *Rec Mgmt Util*, 4-7
- HSC console terminals
 - C2 system requirements, (S) *Security*, C-6
 - C2 system restrictions, (S) *Security*, C-7
- HSC devices
 - configuring during system startup, (S) *Sys Mgr Essentials*, 7-6
 - disabling configuration during system startup, (S) *Sys Mgr Essentials*, 7-8
 - dual-ported, (S) *VMScluster Sys*, 6-2, 6-4
- HSC disk controllers, (P) *I/O User*, 2-2
- HSC disks, (S) *VMScluster Sys*, 3-13; (P) *I/O User*, 2-11
 - and tapes, (S) *VMScluster Sys*, 1-3
 - dual-pathed, (S) *VMScluster Sys*, 6-12
- HSC subsystems, (G) *SW Overview*, 1-8, 3-19; (S) *VMScluster Sys*, 1-3
 - changing allocation class values, (S) *VMScluster Sys*, 6-9, 8-40
 - served devices, (S) *VMScluster Sys*, 6-15

HSD subsystems, (S) *VMScLuster Sys*, 1-3
 assigning allocation classes on, (S) *VMScLuster Sys*, 6-10

HSJ subsystems, (S) *VMScLuster Sys*, 1-3
 assigning allocation classes on, (S) *VMScLuster Sys*, 6-10
 changing allocation class values, (S) *VMScLuster Sys*, 6-10, 8-40
 dual-ported devices, (S) *VMScLuster Sys*, 6-4

HSM (Hierarchical Shelving Manager)
 not in C2 evaluation, (S) *Security*, C-3

H symbol, (P) *Alpha SDA*, SDA-15; (P) *VAX SDA*, SDA-18

HSZ subsystems, (S) *VMScLuster Sys*, 1-3

HTASK\$ macro, (S) *DECnet Mgmt*, 4-16

Human factors
 See also *Personnel*
 minimizing errors, (S) *Dependable*, 9-9

Humidity
 environmental factor of dependable computing, (S) *Dependable*, 5-3

HW_MODEL keyword
 determining the host architecture, (G) *Compatibility*, 4-13

HX⁺, (P) *Environment*, 2-6

Hyperapplications, (G) *SW Overview*, 5-7

Hyperbolic arc tangent, (P) *MTH\$*, MTH-21, MTH-84

Hyperbolic cosine, (P) *MTH\$*, MTH-50, MTH-88

Hyperbolic sine, (P) *MTH\$*, MTH-101, MTH-133

Hyperbolic tangent, (P) *MTH\$*, MTH-109, MTH-142

Hyperinformation environment, (G) *SW Overview*, 4-17, 5-7; (P) *Environment*, 2-4

Hypertext documents, (S) *TCP/IP*, 3-5

Hyphen (-)
 in a directory name, (G) *User*, 5-9
 subtraction operator, (P) *Debugger*, B-8

hypot routine, (P) *Portable Math*, DPML-38, B-8

H_float floating-point data type, (G) *Compatibility*, 1-12, 4-2

I

I/O

average number of operations pending for a volume, (S) *DECams*, 3-8

BIO, (S) *DECams*, 3-17, 3-24
 limit (BIOLM), (S) *DECams*, 3-24
 limit remaining, (S) *DECams*, 3-17
 wait state, (S) *DECams*, 3-24

byte limit remaining, (S) *DECams*, 3-17

classes, (S) *DECams*, 5-10

default data collection, (S) *DECams*, 5-2

DIO, (S) *DECams*, 3-17, 3-24
 limit (DIOLM), (S) *DECams*, 3-24
 limit remaining, (S) *DECams*, 3-17
 wait state, (S) *DECams*, 3-24

I/O (cont'd)

error messages, (S) *DECams*, 3-17

Fault rate for pages, (S) *DECams*, 3-12

open files, (S) *DECams*, 3-17

PIO, (S) *DECams*, 3-17, 3-24

process
 identifier (PID), (S) *DECams*, 3-17
 summary, (S) *DECams*, 3-16
 summary for node, (S) *DECams*, 3-14

I/O (input/output), (P) *Modular Proc*, 2-15, A-3
 asynchronous, (P) *Modular Proc*, 3-21; (P) *Concepts*, 9-20
 at AST-level, (P) *Modular Proc*, 3-20
 checking device type, (P) *Concepts*, 9-28
 complex, (P) *Concepts*, 7-2
 echo, (P) *Concepts*, 7-39
 exit handler, (P) *Concepts*, 9-31
 file, (P) *Modular Proc*, 2-16
 lowercase, (P) *Concepts*, 7-41
 reading a single line, (P) *Concepts*, 7-4
 reading several lines, (P) *Concepts*, 7-5
 reducing on system disk, (S) *Sys Mgr Tuning*, 16-8
 screen updates, (P) *Concepts*, 7-30
 simple, (P) *Concepts*, 7-2
 status, (P) *Concepts*, 9-22
 synchronous, (P) *Modular Proc*, 3-21; (P) *Concepts*, 9-18
 terminator, (P) *Concepts*, 7-4
 end of file, (P) *Concepts*, 9-31
 record, (P) *Concepts*, 9-31
 timeout, (P) *Concepts*, 7-40
 unsolicited input, (P) *Concepts*, 7-35
 uppercase, (P) *Concepts*, 7-41
 using SYS\$QIO system service, (P) *Concepts*, 9-22
 using SYS\$QIOW system service, (P) *Concepts*, 9-22
 writing simple character data, (P) *Concepts*, 7-6

I/O addresses, (S) *Sys Mgmt Util M-Z*, 5-30

I/O and performance, (P) *File Appl*, 3-1

I/O-bound processes, (S) *VAX Perform*, 3-30; (S) *Alpha Perform*, 11-2

I/O buffers
 pseudoterminal, (P) *I/O User*, 6-3

I/O channel indexes, (P) *Interfaces*, B-2

I/O channels, (P) *Concepts*, 9-11
 assigning, (P) *Sys Svc I*, SYS1-38
 deassigning, (P) *Concepts*, 9-24; (P) *Sys Svc I*, SYS1-172

I/O completion
 recommended test, (P) *Concepts*, 9-16
 status, (P) *Concepts*, 9-23
 synchronizing, (P) *Concepts*, 9-13

- I/O configuration support in SYSMAN, (S)
 - Comparison*, A-1
- I/O counts, (P) *Rec Mgmt Util*, 2-17
- I/O databases, (S) *Sys Mgmt Util M-Z*, 5-27; (S)
 - Comparison*, A-8
 - displaying on Alpha systems, (S) *Sys Mgmt Util M-Z*, 6-40
 - displaying SDA information, (P) *Alpha SDA*, SDA-93; (P) *VAX SDA*, SDA-104
 - global symbols, (P) *Alpha SDA*, SDA-15; (P) *VAX SDA*, SDA-64
- I/O devices
 - getting information asynchronously, (P) *Sys Svc I*, SYS1-325
 - getting information synchronously, (P) *Sys Svc I*, SYS1-345
- I/O drivers
 - disk, (P) *I/O User*, 2-1
 - LAN drivers, (P) *I/O User*, 9-2
 - loading, (S) *Sys Mgmt Util M-Z*, 5-14
 - magnetic tape, (P) *I/O User*, 3-1
 - mailbox, (P) *I/O User*, 4-1
 - replacing with new version of, (S) *Sys Mgmt Util M-Z*, 5-15
- I/O functions
 - See also *Function codes*
 - ACP-QIO interface, (P) *I/O User*, 1-2
 - codes, (P) *Concepts*, 9-10, 9-12; (P) *I/O User*, A-1
 - disk, (P) *I/O User*, 1-2, 2-27
 - for LAN driver, (P) *I/O User*, 9-24
 - list of, (P) *I/O User*, A-1
 - magnetic tape, (P) *I/O User*, 1-2, 3-9
 - mailbox, (P) *I/O User*, 4-5
 - modifier, (P) *Concepts*, 9-11
 - terminal, (P) *I/O User*, 5-27
- I/O limitations, (S) *Alpha Perform*, 14-1 to 14-4
 - adding capacity, (S) *VAX Perform*, 4-29
 - compensating for, (S) *VAX Perform*, 5-12
 - device I/O rate below capacity, (S) *VAX Perform*, 4-25
 - direct I/O rate abnormally high, (S) *VAX Perform*, 4-27
 - for disk and tape operations, (S) *VAX Perform*, 4-24
 - isolating, (S) *VAX Perform*, 4-24
 - reducing demand, (S) *VAX Perform*, 4-29
- I/O mode
 - how to switch for sequential files, (P) *RMS Ref*, A-34
 - procedure for delaying decision until stream connection, (P) *RMS Ref*, A-35
 - when mode switching allowed, (P) *RMS Ref*, A-34
- I/O operations
 - device, (P) *Environment*, 10-1
 - file, (P) *Environment*, 10-1
 - logical, (P) *Concepts*, 9-6
- I/O operations (cont'd)
 - over network, (S) *DECnet Intro*, 2-1
 - overview, (P) *Concepts*, 9-2
 - physical, (P) *Concepts*, 9-5
 - quotas, privileges, and protection, (P) *Concepts*, 9-2
 - remote, (S) *DECnet Intro*, 1-5
 - system services, (P) *Environment*, 10-6, 10-8
 - virtual, (P) *Concepts*, 9-6
- I/O performance
 - using DECram, (G) *SW Overview*, 7-8
 - virtual I/O cache, (G) *SW Overview*, 3-11
- I/O rates
 - determining, (S) *VAX Perform*, 4-25; (S) *Alpha Perform*, 14-2
- I/O requests
 - canceling, (P) *Concepts*, 9-26; (P) *Sys Svc I*, SYS1-77
 - queuing, (P) *Concepts*, 9-12
 - queuing asynchronously, (P) *Sys Svc II*, SYS2-195
 - queuing synchronously, (P) *Sys Svc II*, SYS2-200
- I/O services
 - asynchronous version, (P) *Concepts*, 9-18
 - synchronous version, (P) *Concepts*, 9-18
- I/O statements
 - to access remote task, (S) *DECnet Intro*, 2-15
 - using to access remote files, (S) *DECnet Intro*, 2-12
- I/O statistics
 - in Monitor utility, (S) *Sys Mgmt Util M-Z*, 1-30
- I/O status blocks
 - See *IOSBs*
- I/O subsystem, (G) *SW Overview*, 3-1
 - configuration commands, (G) *Compatibility*, 1-5
 - connections, (G) *SW Overview*, 1-5
- I/O subsystem configuration
 - comparison of I/O subsystem commands on Alpha and VAX systems, (S) *Comparison*, 2-16
 - using SYSMAN instead of SYSGEN on Alpha systems, (S) *Comparison*, 2-16
- I/O system services, (G) *SW Overview*, 4-11
- I/O unit, (P) *File Appl*, 3-9 to 3-14
- IAB (Internet Architecture Board), (S) *TCP/IP*, 1-6, 3-1
- IANs (index bucket area numbers)
 - program example, (P) *RMS Ref*, A-19
- IAS nodes, (S) *DECnet Mgmt*, 9-2
- IBM TN3270 terminal emulation, (S) *TCP/IP*, 3-2
- ICBM
 - See *IOGEN Configuration Building Module*

- ICBs (invocation context blocks), (P) *Interfaces*, B-10; (P) *Calling Std*, 3-31
- ICCS register
 - displaying, (P) *VAX SDA*, SDA-96
- ICMP (Internet Control Messaging Protocol), (S) *TCP/IP*, 2-7
- ICONV commands
 - COMPILE, (G) *V6.2 New Feat*, 5-6
 - CONVERT, (G) *V6.2 New Feat*, 5-10
- IDBs (interrupt dispatch blocks), (P) *Alpha SDA*, SDA-94; (P) *VAX SDA*, SDA-105
- IDENT attribute, (P) *Rec Mgmt Util*, 4-37
- IDENTIFICATION= option, (P) *Linker*, LINK-55
- Identification record
 - ANALYZE/DISK_STRUCTURE, (S) *Sys Mgr Essentials*, 8-56
- Identifier ACEs, (S) *Security*, 4-16 to 4-21, 13-4; (S) *Sys Mgmt Util A-L*, 1-13
 - types of identifiers, (S) *Sys Mgmt Util A-L*, 1-13
- Identifier attributes, (S) *Security*, 8-8 to 8-11; (P) *Concepts*, 23-5
- identifier data type, (P) *Interfaces*, B-10
- Identifier fields
 - file, (S) *Sys Mgr Essentials*, 9-15; (P) *File Appl*, 1-26
 - file-set, (P) *File Appl*, 1-28
 - implementation, (P) *File Appl*, 1-25
 - owner, (P) *File Appl*, 1-25
 - volume, (S) *Sys Mgr Essentials*, 8-39; (P) *File Appl*, 1-25
- Identifier names
 - translating, (P) *Concepts*, 23-11
 - translating to identifier, (P) *Sys Svc I*, SYS1-32
- /IDENTIFIER qualifier, (P) *Debugger*, 10-6
- Identifier records, (P) *Concepts*, 23-8
 - adding to rights database, (P) *Concepts*, 23-12
 - format, (P) *Concepts*, 23-8
 - modifying, (P) *Concepts*, 23-13
 - removing from rights database, (P) *Concepts*, 23-16
- Identifiers, (P) *Concepts*, 23-1, 23-2
 - adding record to rights list, (P) *Sys Svc II*, SYS2-96
 - adding to rights database, (S) *Security*, 8-6; (P) *Concepts*, 23-12
 - alias node, (S) *DECnet Intro*, 3-8
 - as directory owners, (S) *Security*, 8-21
 - as file owners, (S) *Security*, 5-9, 5-10
 - assigning to users, (S) *Security*, 8-7
 - attributes, (P) *Concepts*, 23-4, 23-5
 - auditing use of, (S) *Security*, 9-7
 - circuit, (S) *DECnet Intro*, 3-33
 - comparing, (P) *DECthreads*, pthread-41
 - creating, (S) *Security*, 4-17
 - customizing, (S) *Security*, 8-4
 - default, (S) *Sys Mgmt Util A-L*, 5-8
- Identifiers (cont'd)
 - defining, (P) *Concepts*, 23-1
 - determining holders of, (P) *Concepts*, 23-13
 - displaying process, (G) *User*, 19-2; (S) *Security*, 4-4
 - downline load, (S) *DECnet Mgmt Util*, 3-45, 3-48
 - environmental, (G) *User*, 19-2; (S) *Security*, 4-3, 4-4, 8-4; (S) *Sys Mgr Essentials*, 11-10; (S) *Sys Mgmt Util A-L*, 1-13
 - facility, (S) *Security*, 4-4; (P) *Concepts*, 23-4
 - facility-specific, (P) *Concepts*, 23-4
 - finding, (P) *Sys Svc I*, SYS1-297
 - format, (S) *Security*, 4-3; (P) *Concepts*, 23-2
 - general, (G) *User*, 19-2; (S) *Security*, 4-3, 4-4, 4-17; (S) *Sys Mgr Essentials*, 11-10; (S) *Sys Mgmt Util A-L*, 1-13, 1-16; (P) *Concepts*, 23-2
 - global sections, (P) *Interfaces*, B-15
 - granting, (S) *Sys Mgmt Util A-L*, 1-13, 5-28
 - granting to a process, (S) *Sys Mgmt Util A-L*, 1-15
 - in ACEs, (S) *Security*, 4-16
 - line, (S) *DECnet Intro*, 3-33
 - modifying in rights database, (P) *Sys Svc II*, SYS2-141
 - node, (S) *DECnet Intro*, 3-33
 - of a process, (S) *Security*, 4-1
 - protected subsystems and, (S) *Security*, 13-6
 - removing, (S) *Security*, 8-7
 - removing from rights database, (P) *Concepts*, 23-16; (P) *Sys Svc II*, SYS2-206
 - renaming, (S) *Sys Mgmt Util A-L*, 5-45
 - reserved, (S) *Security*, 13-3
 - resource
 - and directory ownership, (S) *Sys Mgmt Util A-L*, 1-9
 - resource, directory ownership and, (S) *Security*, 8-16
 - revoking, (S) *Sys Mgmt Util A-L*, 5-45
 - revoking from process, (P) *Sys Svc II*, SYS2-215
 - rights, (P) *Interfaces*, B-15
 - rights database, (P) *Interfaces*, B-15
 - search string, (P) *Debugger*, 10-6
 - security audit reports and, (S) *Security*, 4-5
 - specifying characteristics of, (S) *Sys Mgmt Util A-L*, 1-16
 - specifying multiple pairs of, (S) *Sys Mgmt Util A-L*, 1-16
 - system-defined, (S) *Sys Mgr Essentials*, 11-10; (P) *Concepts*, 23-3
 - translating value to identifier name, (P) *Sys Svc II*, SYS2-105
 - types, (S) *Security*, 4-3; (S) *Sys Mgr Essentials*, 11-10; (S) *Sys Mgmt Util A-L*, 1-13

Identifiers (cont'd)

- UIC, (G) *User*, 19-2; (S) *Security*, 4-3, 4-4;
(S) *Sys Mgr Essentials*, 11-10
- uniqueness requirement, (S) *Security*, 11-5
- user, (P) *Interfaces*, B-15, B-16
- Identifiers rights, (S) *Sys Mgmt Util M-Z*, 6-25
- for disk quota file, (S) *Sys Mgmt Util M-Z*,
6-21
- Identifier values
 - translating, (P) *Concepts*, 23-11
- Identifying
 - business requirements, (S) *Dependable*, 1-4,
4-1
 - circuits, (S) *DECnet Mgmt*, 3-24
 - constraints, (S) *Dependable*, 1-5
 - events, (S) *DECnet Mgmt*, 3-63
 - lines, (S) *DECnet Mgmt*, 3-36
 - node address, (S) *DECnet Mgmt*, 2-2, 3-7
 - node name, (S) *DECnet Mgmt*, 2-2, 3-7
 - objects, (S) *DECnet Mgmt*, 3-59
- IDENT keyword, (P) *Rec Mgmt Util*, 4-37
- IDL (Interface Definition Language), (G) *SW
Overview*, 6-13; (P) *Environment*, 3-6
- compiler, (G) *SW Overview*, 6-14
- Idle mode, (S) *Alpha Perform*, 9-7
- Idle processes, (S) *Alpha Perform*, 6-13
- Idle queue status, (S) *Sys Mgr Essentials*, 13-51
- /ID qualifier, (P) *VAX SDA*, SDA-148
- IDXs (index descriptors), (P) *Alpha SDA*, SDA-75;
(P) *VAX SDA*, SDA-80
- IDX_NCMR option, (P) *Rec Mgmt Util*, 4-27
- IEEE (Institute of Electrical and Electronics
Engineers), (G) *SW Overview*, 6-3, 6-10, A-1
- definition of open system, (G) *SW Overview*,
2-1
- POSIX standards, (G) *SW Overview*, 2-2
- IEEE floating-point control register
 - setting, (P) *Sys Svc II*, SYS2-108
- IETF (Internet Engineering Task Force), (G) *SW
Overview*, 6-10
- IFABs (internal file access blocks), (P) *Alpha
SDA*, SDA-75; (P) *VAX SDA*, SDA-80
- IF command, (G) *DCL A-M*, DCLI-245 to
DCLI-247; (P) *Debugger*, 12-10
- using in command procedures, (G) *User*, 15-10
- IFIs (internal file identifiers), (P) *Alpha SDA*,
SDA-75; (P) *VAX SDA*, SDA-80
- removing, (P) *Concepts*, 10-13
- IFL
 - program example, (P) *RMS Ref*, A-19
- If states, (P) *SMG\$*, 3-3
 - composed input, (P) *Concepts*, 7-28
- /IF_STATE qualifier, (P) *Debugger*, 12-9; (P) *VAX
SDA*, SDA-49
- /IGNORE qualifier
 - in Backup utility, (S) *Sys Mgmt Util A-L*, 7-34

Image

- applying an ACE to, (S) *Sys Mgmt Util A-L*,
1-15
- Image activation, (P) *File Appl*, 5-5
 - reducing, (S) *Alpha Perform*, 17-1
- Image activator
 - description, (P) *Linker*, 1-4
 - global symbols, (P) *Alpha SDA*, SDA-15,
SDA-61; (P) *VAX SDA*, SDA-64
 - GSMATCH processing, (P) *Linker*, LINK-53
 - performing image optimizations, (P) *Linker*,
4-11
 - shareable image ID processing, (P) *Linker*,
LINK-53
- Image backup
 - command format for disks, (S) *Sys Mgr
Essentials*, 10-32
 - command format for tapes, (S) *Sys Mgr
Essentials*, 10-31
 - definition, (S) *Sys Mgr Essentials*, 10-2; (S)
Sys Mgmt Util A-L, 7-4
 - restoring files from, (S) *Sys Mgr Essentials*,
10-42
 - to disk, (S) *Sys Mgr Essentials*, 10-32
 - to tape, (S) *Sys Mgr Essentials*, 10-31, 10-32
- Image compatibility
 - mixing native and translated images, (G)
Compatibility, 3-8
- Image exit, (P) *Sys Svc I*, SYS1-268
- Image files, (G) *DCL A-M*, DCLI-21 to DCLI-23
- Image I/O segments, (P) *Linker*, LINK-56
- Image I/O structures, (P) *VAX SDA*, SDA-81
- Image-level accounting, (S) *VAX Perform*, 3-3;
(S) *Alpha Perform*, 7-3 to 7-5
 - collecting data, (S) *VAX Perform*, 3-4
- IMAGELIB.OLB file, (P) *Concepts*, 17-5; (P)
Linker, 2-13, LINK-14
 - included in image map files, (P) *Linker*,
LINK-8
 - order of processing, (P) *Linker*, 2-18
 - processing by linker, (P) *Linker*, LINK-36,
LINK-37
- Image map files
 - brief, (P) *Linker*, 5-2, LINK-6
 - components of, (P) *Linker*, 5-2
 - creating, (P) *Linker*, 1-14, 5-1, LINK-20
 - default, (P) *Linker*, 5-2
 - full, (P) *Linker*, 5-2, LINK-14
 - image section synopsis, (P) *Linker*, 3-20, 5-4
 - image synopsis, (P) *Linker*, 5-10
 - linker's writing of, (P) *Linker*, 3-24
 - link run statistics, (P) *Linker*, 5-11
 - listing symbols by name, (P) *Linker*, 5-8
 - listing symbols by value, (P) *Linker*, 5-9
 - naming, (P) *Linker*, LINK-20
 - object module synopsis, (P) *Linker*, 5-3
 - verifying order of processing, (P) *Linker*,
2-17

Image map files (cont'd)

- program section synopsis, (P) *Linker*, 5-6
- symbol characterization codes, (P) *Linker*, 5-9
- symbols cross-reference section, (P) *Linker*, 5-8, LINK-8
- Image mode, (S) *Sys Mgmt Util A-L*, 7-35
- /IMAGE qualifier, (P) *Alpha SDA*, SDA-59, SDA-155; (P) *VAX SDA*, SDA-179
- in Backup utility, (S) *Sys Mgmt Util A-L*, 7-35
- Image Registry facility, (S) *Sys Mgr Essentials*, 5-22
- Image rundown, (P) *Concepts*, 13-73
 - effect on logical names, (P) *Concepts*, 10-5
 - forcing, (P) *Sys Svc I*, SYS1-305
- Images, (G) *SW Overview*, 3-1, 5-2
 - See also Executable images, Known images, Shareable images, and System images
 - See also Executable images and Shareable images
 - accounting, (S) *Sys Mgmt Util A-L*, 11-5, 11-8, 11-19
 - activation of, (P) *Linker*, LINK-52
 - activation of, analyzing, (S) *VAX Perform*, 4-5
 - activation of, reducing, (S) *VAX Perform*, 5-2
 - allocating memory for, (P) *Linker*, 3-17
 - base address of, in map, (P) *Linker*, 5-10
 - compression of, (P) *Util Routines*, DCX-1
 - concurrent access by multiple users, (S) *Sys Mgr Tuning*, 16-11
 - continuing execution of, (G) *DCL A-M*, DCLI-63
 - creating, (G) *Compatibility*, 4-7
 - creating an image map file, (P) *Linker*, LINK-14, LINK-20
 - creating resident images, (P) *Linker*, LINK-26
 - default page size, (P) *Linker*, LINK-5
 - definition, (S) *Sys Mgr Tuning*, 16-9; (S) *Alpha Perform*, 5-1
 - determining frequency of use, (S) *Sys Mgr Tuning*, 16-15, 16-16
 - enhancing performance of installed images, (P) *Linker*, 1-16
 - executable, (S) *Sys Mgr Tuning*, 16-9, 16-14, 16-15
 - execute-only, (S) *Sys Mgr Tuning*, 16-15
 - executing in detached process, (G) *DCL N-Z*, DCLII-55
 - executing in subprocess, (G) *DCL N-Z*, DCLII-55
 - exiting, (P) *Concepts*, 3-41, 13-73
 - for subprocess, (P) *Concepts*, 1-9
 - header resident, (S) *Sys Mgr Tuning*, 16-10, 16-12; (S) *Sys Mgmt Util A-L*, 11-6, 11-8, 11-19
 - hibernation
 - See RUN command
 - I/O segment, (P) *Linker*, LINK-56

Images (cont'd)

- improving performance, (S) *Comparison*, 2-26, 5-13
- initialization of by linker, (P) *Linker*, 1-2
- initializing, (P) *Linker*, 3-23
- installing, (S) *Alpha Perform*, 4-2, 6-18
 - effect on RUN command, (S) *Sys Mgr Tuning*, 16-10
 - in system startup, (S) *Sys Mgr Essentials*, 5-4, 5-12, 5-13; (S) *Sys Mgr Tuning*, 16-10
 - reasons for, (S) *Sys Mgr Tuning*, 16-9
 - security ramifications, (S) *Security*, 8-14
 - subsystem images, (S) *Security*, 13-1
 - to improve system performance, (S) *Sys Mgr Tuning*, 16-7
- invoking with automatic foreign commands, (G) *User*, 14-38
- invoking without using symbols, (G) *User*, 14-38
- known, (S) *Sys Mgr Tuning*, 16-10
 - installing, (S) *Alpha Perform*, 1-5
- length of, in map, (P) *Linker*, 5-10
- linkable, (S) *Sys Mgr Tuning*, 16-9
- linking to OpenVMS, (P) *DECthreads*, B-2
- loading site-specific, (P) *Concepts*, 23-26
- multiprocessing synchronization, (S) *Comparison*, 2-18
- naming, (P) *Linker*, LINK-13
- operating with translated VAX images, (P) *Linker*, LINK-21
- optimizing performance, (P) *Linker*, 1-3, 1-15, LINK-25
 - Alpha object language commands, (P) *Linker*, B-37
 - calculating JSR hints, (P) *Linker*, B-41
- patching
 - not supported on Alpha systems, (S) *Comparison*, 3-10
- permanently open, (S) *Sys Mgr Tuning*, 16-10, 16-12
- privileged, (S) *Sys Mgr Tuning*, 16-10, 16-13, 16-14; (S) *Sys Mgmt Util A-L*, 11-6, 11-9, 11-19
 - security caution, (S) *Sys Mgr Tuning*, 16-13
- privileged, securing, (P) *Debugger*, 9-5
- privileged shareable, (S) *Sys Mgr Tuning*, 16-14
- protected, (S) *Sys Mgr Tuning*, 16-11, 16-14
- protecting installed, (S) *Sys Mgr Tuning*, 16-15; (S) *Sys Mgmt Util A-L*, 11-7, 11-9, 11-19
- redirecting output from, (G) *User*, 16-10
- reducing the size of, (P) *Linker*, 3-25, LINK-10
- relinking to improve system performance, (S) *Sys Mgr Tuning*, 16-7
- resident, (P) *Linker*, 1-16

Images (cont'd)

- resident (Alpha), (S) *Sys Mgr Tuning*, 16-11
- resuming execution of, (G) *DCL A-M*, DCLI-63
- running, (G) *DCL N-Z*, DCLII-53
- running in protected modes, (S) *Sys Mgr Tuning*, 16-11, 16-14
- slicing on Alpha systems, (S) *Sys Mgr Tuning*, 16-12
- specifying identification character string, (P) *Linker*, LINK-55
- specifying size with the RUN command, (G) *DCL N-Z*, DCLII-59
- specifying stack size, (P) *Linker*, LINK-62
- specifying value of name field in image header, (P) *Linker*, LINK-58
- storing in contiguous disk blocks, (P) *Linker*, LINK-7
- synopsis of in image map file, (P) *Linker*, 5-10
- system version dependent
 - registering, (S) *Sys Mgr Essentials*, 5-22
- terminating with EXIT command, (G) *DCL A-M*, DCLI-222
- user-level
 - calling of protected code, (S) *Sys Mgr Tuning*, 16-11, 16-14
- using ANALYZE/IMAGE command to examine, (P) *Linker*, 1-12
- writable, (S) *Sys Mgr Tuning*, 16-11

Images, installing

- subsystem images, (S) *Security*, 13-3

Image sections, (P) *Concepts*, 19-23, 20-25

- attributes, (P) *Linker*, 3-18
 - demand-zero attribute, (P) *Linker*, 3-18
 - determined by program section attributes, (P) *Linker*, 3-12
- binding address to, (P) *Linker*, LINK-27
- controlling creation of, (P) *Linker*, 3-21
- creating, (P) *Linker*, 3-9
- creating from program sections, (P) *Linker*, 3-10
- demand-zero, (P) *Linker*, LINK-10, LINK-50
- determining the address of, (P) *Linker*, 3-18
- determining the program sections in, (P) *Linker*, 3-16
- examining with the ANALYZE/IMAGE utility, (P) *Linker*, 3-20
- filling with binary information, (P) *Linker*, 3-23
- fix-up, (P) *Linker*, 3-24
- listed in map file, (P) *Linker*, 3-15, 3-20, 5-4
- maximum number of, (P) *Linker*, LINK-57
- order, in cluster, (P) *Linker*, 3-13
- protection of, (P) *Linker*, LINK-59
- specifying the base address of, (P) *Linker*, LINK-47
- type designations, (P) *Linker*, 3-19
- using CLUSTER= option to control, (P) *Linker*, 3-22

Image specification

- effect of version number delimiter on overhead, (P) *File Appl*, 5-5
- /IMAGES qualifier, (P) *Alpha SDA*, SDA-127; (P) *VAX SDA*, SDA-148
- Images rundown, (P) *Concepts*, 3-42
- IMAGE_MANAGEMENT.EXE file
 - global symbols, (P) *VAX SDA*, SDA-64
- IMAGE_MANAGEMENT.STB file
 - global symbols, (P) *Alpha SDA*, SDA-61
- IMGDEF.STB file, (P) *Alpha SDA*, SDA-15; (P) *VAX SDA*, SDA-64
- IMGIOCNT system parameter
 - overriding at link time, (P) *Linker*, LINK-56
- Immediate value
 - Alpha argument item, (P) *Calling Std*, 3-48
 - definition, (P) *Calling Std*, 1-5
 - large, (P) *Calling Std*, 3-51
- Implementation tables
 - Ada, (P) *Interfaces*, B-16
 - APL, (P) *Interfaces*, B-19
 - BASIC, (P) *Interfaces*, B-21
 - BLISS, (P) *Interfaces*, B-24
 - C, (P) *Interfaces*, B-27
 - COBOL, (P) *Interfaces*, B-30
 - Fortran, (P) *Interfaces*, B-33
 - MACRO, (P) *Interfaces*, B-37
 - OpenVMS usage, (P) *Interfaces*, B-1
 - Pascal, (P) *Interfaces*, B-40
 - PL/I, (P) *Interfaces*, B-43
 - RPG II, (P) *Interfaces*, B-49
 - SCAN, (P) *Interfaces*, B-51
- IMPORT privilege, (S) *Security*, A-8
- Inbound logical link connections, (S) *DECnet Mgmt*, 1-21
- INBOUND parameter
 - for node type specification, (S) *DECnet Intro*, 3-26
- /INCLUDE qualifier, (P) *Linker*, LINK-17
 - effect on symbol resolution processing, (P) *Linker*, 2-13
 - in Mount utility, (S) *Sys Mgmt Util M-Z*, 2-22
 - specified with the /LIBRARY qualifier, (P) *Linker*, 2-13
 - specifying libraries as linker input, (P) *Linker*, 1-9
- Incoming LAT connections, (S) *Sys Mgmt Util A-L*, 13-27
- INCOMING PROXY parameter, (S) *DECnet Mgmt*, 2-35
- Incremental backup
 - command format for disks, (S) *Sys Mgr Essentials*, 10-35
 - command format for tapes, (S) *Sys Mgr Essentials*, 10-34
 - definition, (S) *Sys Mgr Essentials*, 10-2; (S) *Sys Mgmt Util A-L*, 7-4

Incremental backup (cont'd)

restoring files from, (S) *Sys Mgr Essentials*, 10-44

to disk, (S) *Sys Mgr Essentials*, 10-34

to tape, (S) *Sys Mgr Essentials*, 10-33

Incremental mode

restoring files, (S) *Sys Mgmt Util A-L*, 7-37

/INCREMENTAL qualifier

in Backup utility, (S) *Sys Mgmt Util A-L*, 7-37

Independently recoverable system kernels, (S) *Dependable*, 4-6

Independently recoverable units

See IRUs

Independent processes paradigm, (S) *Dependable*, 8-14

Index bucket area numbers

See IANs

INDEX BUCKET structure, (P) *File Appl*, 10-18

Index compression

prohibition against using, (P) *File Appl*, 4-8

restrictions, (P) *File Appl*, 3-2, 3-19, 3-26

Index depth, (P) *File Appl*, A-2

INDEXED attribute, (P) *Rec Mgmt Util*, 4-21

Indexed files, (P) *File Appl*, 2-19, 3-18

advantages of using, (P) *File Appl*, 2-25

allocating, (P) *File Appl*, A-1

alternate key, (P) *File Appl*, 2-20

bit map, (P) *File Appl*, 1-7

block allocation, (P) *RMS Ref*, 7-3

bucket size, (P) *File Appl*, 3-10, 3-25, 7-18, A-1

bucket size for multiple areas, (P) *RMS Ref*, RMS-15

buffering, (P) *File Appl*, 7-18, 7-19

composition, (P) *RMS Ref*, RMS-19

compression, (P) *Rec Mgmt Util*, 4-27; (P) *File Appl*, 3-2, 3-19, 3-26

creating, (P) *RMS Ref*, RMS-19

creating with multiple keys, (P) *RMS Ref*, A-16

default bucket size, (P) *RMS Ref*, 4-4

deferred-write option with, (P) *File Appl*, 3-11

designing, (P) *File Appl*, 3-18 to 3-28

determining keys and areas, (P) *RMS Ref*, 16-1

determining key size, (P) *RMS Ref*, 6-4

determining key value, (P) *RMS Ref*, RMS-50

determining maximum record size, (P) *RMS Ref*, 4-22

determining number of buffers, (P) *RMS Ref*, 6-7

disadvantages of using, (P) *File Appl*, 2-25

duplicate keys, (P) *Rec Mgmt Util*, 4-26

establishing index, (P) *RMS Ref*, RMS-7

examining, (P) *File Appl*, 10-16

example of processing duplicate keys, (P) *RMS Ref*, 6-9

example of specifying, (P) *RMS Ref*, A-5

Indexed files (cont'd)

extend size, (P) *File Appl*, 3-6

fast delete option, (P) *RMS Ref*, 6-16

fill factor, (P) *File Appl*, 3-10

global buffers, (P) *File Appl*, 7-19

identifying data area, (P) *RMS Ref*, 12-3

INDEXF.SYS, (P) *File Appl*, 1-6

inhibiting index update, (P) *RMS Ref*, 12-12

initial extent quantity, (P) *RMS Ref*, 4-3

inserting records with Put service, (P) *RMS Ref*, RMS-75

invoking Get and Find services for, (P) *RMS Ref*, 6-3

key of reference, (P) *RMS Ref*, 6-3

key type, (P) *File Appl*, 2-20

level 1 index, (P) *Rec Mgmt Util*, 4-27

loading, (P) *Rec Mgmt Util*, 2-8

making contiguous, (P) *File Appl*, 10-28

methods of accessing records, (P) *RMS Ref*, 6-5

optimizing performance, (P) *File Appl*, 3-18 to 3-28

options, (P) *RMS Ref*, 6-11

organization, (P) *File Appl*, 1-2

positioning area, (P) *RMS Ref*, 7-6

primary key, (P) *File Appl*, 2-20

Prolog 1 files and Prolog 2 files, (P) *File Appl*, 3-19

prolog selection, (P) *RMS Ref*, RMS-20

reclaiming buckets in, (P) *File Appl*, 10-28

record access, (P) *File Appl*, 8-9 to 8-14

redesigning, (P) *File Appl*, 10-26

reformatting, (P) *Rec Mgmt Util*, 2-1

reorganizing, (P) *File Appl*, 10-28

restriction against VFC format, (P) *RMS Ref*, 4-18

restriction to changing primary key, (P) *RMS Ref*, RMS-105

run-time options, (P) *File Appl*, 9-11, 9-12

selection of default extension quantity, (P) *File Appl*, 3-6

separating index levels, (P) *RMS Ref*, 12-11

size of data bucket, (P) *RMS Ref*, 12-4

specifying bucket size, (P) *RMS Ref*, 4-4, 7-4

specifying index area, (P) *RMS Ref*, 12-9

specifying index bucket size, (P) *RMS Ref*, 12-10

string key options, (P) *RMS Ref*, 12-8

structure, (P) *Rec Mgmt Util*, 1-1, 1-3, 4-28

tuning, (P) *File Appl*, 3-18 to 3-28

update-if option, (P) *RMS Ref*, 6-18

use of areas in, (P) *RMS Ref*, A-19

use of end-of-file option, (P) *RMS Ref*, RMS-7

verifying sort order, (P) *RMS Ref*, RMS-7

with allocation options, (P) *RMS Ref*, 4-14

with collating sequences, (P) *RMS Ref*, 12-3

with deferred-write option, (P) *RMS Ref*, RMS-12

with Get service, (P) *RMS Ref*, RMS-50

Indexed files (cont'd)

- with global buffers, (P) *File Appl*, 3-28
- with XABKEY, (P) *RMS Ref*, 12-1

/INDEXED qualifier, (P) *File Appl*, 7-19

Index entries

- ordering, (P) *File Appl*, 2-5

Indexes

- creating, (G) *DCL N-Z*, DCLII-70
- creating source file with DSR, (G) *DCL N-Z*, DCLII-65

Index files, (S) *Sys Mgr Tuning*, A-4 to A-8
in volume sets, (S) *Sys Mgr Essentials*, 8-32
placing on disk, (G) *DCL A-M*, DCLI-253

Indexing

- backward, (P) *MTH\$*, 2-6
- forward, (P) *MTH\$*, 2-6

Index levels, (P) *Rec Mgmt Util*, 4-5

- comparing primary key and alternate keys, (P) *RMS Ref*, 12-10

- number of, (P) *File Appl*, A-2

/INDEX qualifier, (P) *Alpha SDA*, SDA-72,
SDA-127; (P) *VAX SDA*, SDA-77, SDA-148

Index records, (P) *Rec Mgmt Util*, 4-5

Index structures, (P) *File Appl*, 3-18, 3-25

- Level 0, (P) *File Appl*, 3-20

- Level 1, (P) *File Appl*, 3-20

- primary, (P) *File Appl*, 3-20

INDEX_AREA attribute, (P) *Rec Mgmt Util*, 4-26,
4-27; (P) *File Appl*, 3-25

INDEX_COMPRESSION attribute, (P) *Rec Mgmt Util*, 4-5, 4-27

INDEX_FILL attribute, (P) *Rec Mgmt Util*, 4-5,
4-27

INDEX_SPACE_OCCUPIED attribute, (P) *Rec Mgmt Util*, 4-5

Indirection operator

- See Contents-of operator

Industry standards

- OpenVMS support, (P) *Environment*, 2-2

/INFORMATIONALS qualifier, (P) *Linker*,
LINK-18

Information management, (G) *SW Overview*, 7-15

InfoServer, (G) *SW Overview*, 1-6, 3-13, 6-8

InfoServer

- automatic service, (S) *Sys Mgr Tuning*, 23-4
- availability, (S) *Sys Mgr Tuning*, 23-4
- backing up system disks, (S) *Sys Mgr Essentials*, 10-60
- commands, (S) *Sys Mgr Tuning*, 23-7
- console terminal, (S) *Sys Mgr Tuning*, 23-6
- determining default server name, (S) *Sys Mgr Tuning*, 23-6
- downline loading with, (S) *Sys Mgr Tuning*, 23-2
- fail over, (S) *Sys Mgr Tuning*, 23-4
- functions, (S) *Sys Mgr Tuning*, 23-1
- Help facility, (S) *Sys Mgr Tuning*, 23-8
- load balancing, (S) *Sys Mgr Tuning*, 23-6

InfoServer (cont'd)

local connections, (S) *Sys Mgr Tuning*, 23-6

management session, ending, (S) *Sys Mgr Tuning*, 23-7

mounting devices

- in system startup, (S) *Sys Mgr Tuning*, 23-14

multicast address feature, (S) *Sys Mgr Tuning*, 23-5

protocols, (S) *Sys Mgr Tuning*, 23-5

quick access to duplicate services for clients, (S) *Sys Mgr Tuning*, 23-4

relationship to client systems, (S) *Sys Mgr Tuning*, 23-2

remote connections, (S) *Sys Mgr Tuning*, 23-6

removing media, (S) *Sys Mgr Tuning*, 23-4

server name, (S) *Sys Mgr Tuning*, 23-6

service disconnection, (S) *Sys Mgr Tuning*, 23-4

setting up in system startup, (S) *Sys Mgr Tuning*, 23-10

starting a session, (S) *Sys Mgr Tuning*, 23-6
supported on Alpha systems, (S) *Comparison*, 2-4

support for X terminals, (S) *Sys Mgr Tuning*, 23-4

system overview, (S) *Sys Mgr Tuning*, 23-1

virtual device server, (S) *Sys Mgr Tuning*, 23-1

virtual device units, (S) *Sys Mgr Tuning*, 23-13

X terminal client, (S) *Sys Mgr Tuning*, 23-4

InfoServer Client for OpenVMS

components, (S) *Sys Mgr Tuning*, 23-8

functions, (S) *Sys Mgr Tuning*, 23-8

mounting devices

- in system startup, (S) *Sys Mgr Essentials*, 5-13

setting up in system startup, (S) *Sys Mgr Essentials*, 5-13

software, (S) *Sys Mgr Tuning*, 23-9

- starting automatically, (S) *Sys Mgr Tuning*, 23-10

- startup restrictions, (S) *Sys Mgr Tuning*, 23-12

InfoServer password, (S) *Sys Mgr Tuning*, 23-6

Inherit scheduling attribute, (P) *DECthreads*, 2-5, cma-15

obtaining, (P) *DECthreads*, pthread-7

usefulness, (P) *DECthreads*, pthread-12, cma-21

Initialization

argument list, (P) *Concepts*, 16-5

at run time, (P) *Modular Proc*, 3-13

code, (P) *Debugger*, 2-4

debugging session, (P) *Debugger*, 2-4, 5-7, 13-7

erasing home blocks, (S) *Sys Mgmt Util A-L*, 3-8

one-time, (P) *DECthreads*, pthread-63, cma-55

Initialization (cont'd)

- using LIB\$INITIALIZE, (P) *Modular Proc*, 3-13
 - volume from within a program, (P) *Concepts*, 9-36
 - example, (P) *Concepts*, 9-36
 - Initialization code, (P) *Debugger*, 13-9
 - global symbols, (P) *Alpha SDA*, SDA-61
 - Initialization files, (G) *User*, 6-21
 - creating, (S) *Sys Mgr Tuning*, 20-15; (S) *Sys Mgmt Util M-Z*, 4-48
 - debugger, (P) *Debugger*, 12-4, B-1
 - default specification, (S) *Sys Mgmt Util M-Z*, 6-4
 - establishing SHOW CLUSTER reports, (S) *Sys Mgr Tuning*, 20-5
 - establish SHOW CLUSTER report, (S) *Sys Mgmt Util M-Z*, 4-4
 - SHOW CLUSTER
 - creating, (S) *Sys Mgr Tuning*, 20-14
 - SHOW_CLUSTER\$INIT, (S) *Sys Mgr Tuning*, 20-14, 20-15
 - use with SYSMAN, (S) *Sys Mgr Essentials*, 2-19; (S) *Sys Mgmt Util M-Z*, 6-4
- ## Initialization macros
- example, (P) *RMS Ref*, A-5
 - functions, (P) *RMS Ref*, A-1
 - multiple bit field, (P) *RMS Ref*, A-5
 - placement guidelines, (P) *RMS Ref*, A-7
 - using, (P) *RMS Ref*, A-6
- ## Initialization of system
- in a multiprocessing system, (S) *Sys Mgr Tuning*, 26-2
- ## Initialization procedures, (S) *Sys Mgmt Util A-L*, D-1
- ## Initialization routines
- declaring, (P) *Concepts*, 16-6
 - dispatching, (P) *Concepts*, 16-6
 - one-time, (P) *DECthreads*, 2-14
 - options, (P) *Concepts*, 16-7
- ## /INITIALIZE=CONTINUATION qualifier
- in Mount utility, (S) *Sys Mgmt Util M-Z*, 2-23
- ## INITIALIZE command, (G) *User*, 12-4; (G) *DCL A-M*, DCLI-248 to DCLI-257; (P) *I/O User*, 3-22
- creating volume identifiers for continuation volumes, (S) *Sys Mgr Essentials*, 8-39
 - disk volumes, (S) *Sys Mgr Essentials*, 8-11
 - /ERASE qualifier, (S) *Security*, 5-12
 - Files-11 On-Disk Structure, (G) *User*, 12-5
 - for formatting page and swap file disks during system startup, (S) *Sys Mgr Essentials*, 5-6
 - format, (G) *User*, 12-5
 - in Monitor utility, (S) *Sys Mgmt Util M-Z*, 1-8
 - in Show Cluster utility, (S) *Sys Mgmt Util M-Z*, 4-37

INITIALIZE command (cont'd)

- mounting volume sets, (S) *Sys Mgr Essentials*, 8-39
 - qualifiers, (S) *Sys Mgr Essentials*, 8-12
 - setting device protection, (S) *Sys Mgr Essentials*, 8-16
 - tape volumes, (S) *Sys Mgr Essentials*, 9-12, 9-22
 - tape volumes, (S) *Sys Mgr Essentials*, 9-21, 9-22
 - to format and write label to volume, (S) *Sys Mgr Essentials*, 8-11
 - window size and, (P) *File Appl*, 9-8
- ## /INITIALIZE qualifier
- in Backup utility, (S) *Sys Mgmt Util A-L*, 7-39
- ## INITIALIZE/QUEUE command, (G) *DCL A-M*, DCLI-258 to DCLI-272; (S) *Sys Mgr Essentials*, 13-16, 13-48
- activating autostart queues, (S) *Sys Mgr Essentials*, 13-15, 13-49
 - assigning a default form, (S) *Sys Mgr Essentials*, 13-63
 - assigning characteristics, (S) *Sys Mgr Essentials*, 13-59
 - canceling characteristics, (S) *Sys Mgr Essentials*, 13-59
 - comparison on Alpha and VAX systems, (S) *Comparison*, 3-5
 - controlling page overflow, (S) *Sys Mgr Essentials*, 13-44
 - creating a generic queue, (S) *Sys Mgr Essentials*, 13-17
 - mounting a form, (S) *Sys Mgr Essentials*, 13-64
 - qualifiers using Alpha pagelet values, (S) *Comparison*, 5-11
 - setting block limits, (S) *Sys Mgr Essentials*, 13-32
 - setting scheduling policy, (S) *Sys Mgr Essentials*, 13-32
 - setting UIC-based protection on queues, (S) *Sys Mgr Essentials*, 13-23
 - specifying autostart information, (S) *Sys Mgr Essentials*, 13-15
 - specifying banner pages, (S) *Sys Mgr Essentials*, 13-60
 - specifying job processing options, (S) *Sys Mgr Essentials*, 13-31
 - specifying queue options, (S) *Sys Mgr Essentials*, 13-19
 - specifying reset modules, (S) *Sys Mgr Essentials*, 13-65
 - starting a nonautostart queue, (S) *Sys Mgr Essentials*, 13-16
- ## INITIALIZE/STRUCTURE command, (G) *Compatibility*, A-2

- Initializing, (P) *Modular Proc*, 3-8, A-3
 - a condition variable, (P) *DECthreads*, cma-30
 - DDCMP node, (S) *DECnet Mgmt*, 1-8
 - disk volumes, (G) *User*, 12-5
 - Ethernet node, (S) *DECnet Mgmt*, 1-4
 - images, (P) *Linker*, 1-2, 3-23
 - magnetic tape volumes, (G) *User*, 12-5
 - modular procedures, (P) *Modular Proc*, 3-8
 - Phase III node, (S) *DECnet Mgmt*, 2-29
 - queues, (G) *DCL A-M*, DCLI-258; (S) *Sys Mgr Essentials*, 13-15
 - storage, (P) *Modular Proc*, 3-9
 - tapes
 - using REPLY/BLANK_TAPE, (G) *DCL N-Z*, DCLII-42
 - using REPLY/INITIALIZE_TAPE, (G) *DCL N-Z*, DCLII-42
 - threads routines, (P) *DECthreads*, cma-44
 - using LIB\$INITIALIZE, (P) *Modular Proc*, A-3
 - volumes, (G) *User*, 12-4; (G) *DCL A-M*, DCLI-248
 - assisting users, (S) *Sys Mgr Essentials*, 8-14
 - disk volumes, (S) *Sys Mgr Essentials*, 8-10, 8-13
 - results of, (S) *Sys Mgr Essentials*, 10-13
 - tape volumes, (S) *Sys Mgr Essentials*, 9-5
- Initializing a volume
 - from within a program, (P) *Sys Svc II*, SYS2-113
- INITIAL mode, (S) *Sys Mgmt Util A-L*, 6-8
- INITIAL phase of system startup, (S) *Sys Mgr Essentials*, 5-4, 5-18
- Inline code, (P) *Calling Std*, 3-61
- Input
 - debugger, DBG\$DECW\$DISPLAY, (P) *Debugger*, 2-8, B-1
 - debugger, DBG\$INPUT, (P) *Debugger*, 2-9, 13-6, B-1
 - prompting for from command procedures, (G) *User*, 16-6
 - to batch jobs, (G) *User*, 18-13
- Input address arrays, (P) *Concepts*, 19-9, 20-8
- Input an existing PCF, (S) *Sys Mgr Essentials*, 3-30
- Input converter
 - DDIF, (G) *DCL A-M*, DCLI-66
 - DTIF, (G) *DCL A-M*, DCLI-67
 - Text, (G) *DCL A-M*, DCLI-68
- Input data stream
 - marking beginning of, (G) *DCL A-M*, DCLI-112
 - marking end of, (G) *DCL A-M*, DCLI-206
- Input files
 - concatenating, (P) *Rec Mgmt Util*, 2-5
 - security audit log files, (S) *Sys Mgmt Util A-L*, 4-4
 - temporary defaults in a parameter list, (G) *User*, 5-6
- Input/output
 - See I/O, I/O operations
 - /INPUT qualifier, (P) *Debugger*, 11-20; (P) *Alpha SDA*, SDA-158; (P) *VAX SDA*, SDA-183
- Input specifier
 - to the BACKUP command, (S) *Sys Mgr Essentials*, 10-4
- Input streams
 - defining for created process, (G) *DCL N-Z*, DCLII-55
 - switching control to other processes, (G) *DCL A-M*, DCLI-49; (S) *Sys Mgmt Util M-Z*, 6-13
- Input symbiont for card reader
 - running interactively, (S) *Sys Mgr Essentials*, 7-18
- INQUIRE command, (G) *DCL A-M*, DCLI-273 to DCLI-275
 - compared to READ command, (G) *User*, 16-6
 - using in command procedures, (G) *User*, 15-9
 - with symbols and batch jobs, (G) *User*, 16-7
- Insertion operations, (P) *SMG\$*, 2-8
- Insert mode
 - definition, (G) *User*, 3-16
- INSTALL (Install utility)
 - See Install utility
- Installation
 - configuring SCSI node IDs, (G) *V6.2 New Feat*, 7-20
 - SCSI VMScluster systems, (G) *V6.2 New Feat*, 7-19
- Installation procedures
 - See also VMSINSTAL.COM command procedure
 - asynchronous connection, (S) *DECnet Intro*, 3-19
 - completing, (S) *Sys Mgr Essentials*, 3-13
 - definition, (S) *Sys Mgr Essentials*, 3-4
 - for DECnet network, (S) *DECnet Intro*, 3-1, 3-9
 - on Alpha systems, (S) *Sys Mgr Essentials*, 3-2
 - to run VAX system as a C2 system, (S) *Sys Mgr Essentials*, 3-5
 - verification of successful network, (S) *DECnet Intro*, 3-31
- Installation requirements, (S) *DECamsd*, A-2 to A-4
- Installations
 - comparison between VMSINSTAL and POLYCENTER Software Installation utility, (S) *Comparison*, 2-7
 - media on OpenVMS Alpha systems
 - compact disc, (S) *Comparison*, 2-24
- Installation Verification Procedure
 - See IVP
- INSTALL command, (G) *DCL A-M*, DCLI-276
 - in SYSGEN, (S) *Sys Mgr Tuning*, 15-19; (S) *Sys Mgmt Util M-Z*, 5-13

- INSTALL command
 - in SYSGEN (cont'd)
 - in system startup, (S) *Sys Mgr Essentials*, 5-7
- Installed files
 - See Known images
- Installed products
 - listing on Alpha systems, (S) *Comparison*, 2-25
- Installed resident images
 - Install utility support, (S) *Comparison*, 5-14
 - SYSGEN support, (S) *Comparison*, 5-14
- INSTALLED_PRDS.COM command procedure
 - listing installed products, (S) *Comparison*, 2-25
- Installing DECamsds
 - Alpha, (S) *DECamsds*, A-4 to A-6
 - kit location, (S) *DECamsds*, A-1
 - post-installation tasks, (S) *DECamsds*, A-13
 - preparation, (S) *DECamsds*, A-1
 - requirements, (S) *DECamsds*, A-2
 - VAX, (S) *DECamsds*, A-6 to A-15
- Installing images, (S) *Sys Mgr Tuning*, 16-16
 - See also Known images
 - effect on RUN command, (S) *Sys Mgr Tuning*, 16-10
 - enhancing performance of, (P) *Linker*, 1-16
 - in SYSTARTUP_VMS.COM, (S) *Sys Mgr Essentials*, 5-13
 - link-time considerations, (P) *Linker*, 1-16
 - resident images, (P) *Linker*, LINK-26
- Installing page and swap files
 - in system startup, (S) *Sys Mgr Essentials*, 5-6; (S) *Sys Mgr Tuning*, 15-5, 15-19, 15-21
 - with AUTOGEN, (S) *Sys Mgr Tuning*, 15-18, 15-22
 - with SYPAGSWPFILES.COM command procedure, (S) *Sys Mgr Tuning*, 15-19
 - with SYSGEN, (S) *Sys Mgr Tuning*, 15-19
- Installing shareable images, (P) *Linker*, 1-8
 - creating resident shareable images, (P) *Linker*, 1-16
 - enhancing performance of, (P) *Linker*, 4-11
- Installing software
 - See also POLYCENTER Software Installation utility
 - See also VMSINSTAL.COM command procedure as a batch job, (S) *Sys Mgr Essentials*, 3-32
 - completing procedure, (S) *Sys Mgr Essentials*, 3-13
 - creating a new PCF during, (S) *Sys Mgr Essentials*, 3-30
 - DECnet for OpenVMS license, (S) *DECnet Mgmt*, 6-1
 - deinstalling software, (S) *Sys Mgr Essentials*, 3-34
 - getting product information, (S) *Sys Mgmt Util M-Z*, 3-20
- Installing software (cont'd)
 - identifying kit location, (S) *Sys Mgr Essentials*, 3-28
 - layered products, (S) *VMScluster Sys*, 4-6
 - logging file activity, (S) *Sys Mgr Essentials*, 3-17
 - managing installed software, (S) *Sys Mgr Essentials*, 3-34
 - multiple products at once, (S) *Sys Mgr Essentials*, 3-29
 - network, (S) *DECnet Mgmt*, 6-1
 - noncompliant products, (S) *Sys Mgr Essentials*, 3-27
 - on alternate disk, (S) *Sys Mgr Essentials*, 3-12
 - OpenVMS Alpha systems, (G) *SW Overview*, 3-7
 - OpenVMS VAX systems, (G) *SW Overview*, 3-7
 - POLYCENTER Software Installation utility, (S) *Sys Mgmt Util M-Z*, 3-11
 - preparing for installation, (S) *Sys Mgr Essentials*, 3-6
 - reconfiguring product options, (S) *Sys Mgr Essentials*, 3-32
 - removing installed software, (S) *Sys Mgr Essentials*, 3-34
 - responding to questions during installation, (S) *Sys Mgr Essentials*, 3-30
 - shutting down DECnet, (S) *Sys Mgr Essentials*, 3-7
 - specifying source and destination locations, (S) *Sys Mgr Essentials*, 3-28
 - supplying answers from a PCF, (S) *Sys Mgr Essentials*, 3-30
 - tracking dependencies, (S) *Sys Mgr Essentials*, 3-27
 - using a PCF for consistency, (S) *Sys Mgr Essentials*, 3-22
- Install utility (INSTALL), (S) *Sys Mgmt Util A-L*, 11-4; (S) *Alpha Perform*, 6-18
 - alarms, (S) *Security*, D-5
 - and version checking, (S) *Sys Mgr Essentials*, 5-23
 - auditing changes made through, (S) *Security*, 9-7
 - commands, (S) *Sys Mgmt Util A-L*, 11-5 to 11-20
 - ADD, (S) *Sys Mgmt Util A-L*, 11-5
 - CREATE, (S) *Sys Mgmt Util A-L*, 11-8
 - DELETE, (S) *Sys Mgmt Util A-L*, 11-10
 - EXIT, (S) *Sys Mgmt Util A-L*, 11-11
 - HELP, (S) *Sys Mgmt Util A-L*, 11-11
 - LIST, (S) *Sys Mgmt Util A-L*, 11-12
 - PURGE, (S) *Sys Mgmt Util A-L*, 11-17
 - REMOVE, (S) *Sys Mgmt Util A-L*, 11-18
 - REPLACE, (S) *Sys Mgmt Util A-L*, 11-18
 - determining number frequency of image use, (S) *Sys Mgr Tuning*, 16-15, 16-16
 - exiting, (S) *Sys Mgmt Util A-L*, 11-4

Install utility (INSTALL) (cont'd)

- GHR feature on Alpha systems
 - /RESIDENT qualifier to ADD, CREATE, REPLACE, (S) *Comparison*, 5-14
 - improving performance of images, (S)
 - Comparison*, 2-26
 - improving system performance, (S) *Sys Mgr Tuning*, 16-7, 16-9, 16-10
 - installing images, (S) *VAX Perform*, 1-11
 - invoking, (S) *Sys Mgmt Util A-L*, 11-4
 - listing number of concurrent file accesses, (S) *Sys Mgr Tuning*, 16-8
 - making images header resident, (S) *Sys Mgr Tuning*, 16-10, 16-12
 - making images privileged, (S) *Sys Mgr Tuning*, 16-10, 16-14
 - permanently open images, (S) *Sys Mgr Tuning*, 16-10, 16-12
 - reasons for using, (S) *Sys Mgr Tuning*, 16-9
 - /RESIDENT qualifier on Alpha, (S) *Sys Mgr Tuning*, 16-13
 - security ramifications, (S) *Security*, 8-14, 13-1
 - slicing feature on Alpha, (S) *Sys Mgr Tuning*, 16-13
- Institute of Electrical and Electronics Engineers
- See IEEE
- Instruction memory barriers, (P) *Concepts*, 14-10
- /INSTRUCTION qualifier, (P) *Debugger*, 11-9, 11-20; (P) *Alpha SDA*, SDA-48; (P) *VAX SDA*, SDA-55
- Instruction-related commands
- Alpha object language, (P) *Linker*, B-37
- Instructions
- See also Vector instructions
- depositing, (P) *Debugger*, 8-19, 8-21
- display, (P) *Debugger*, 3-25, 8-19, 11-8, 14-15
 - for routine on call stack, (P) *Debugger*, 3-22, 11-10
- display kind, (P) *Debugger*, 11-16
- EXAMINE/INSTRUCTION command, (P) *Debugger*, 8-19, 11-9
- EXAMINE/OPERANDS command, (P) *Debugger*, 8-19
- examining, (P) *Debugger*, 8-19, 11-8
- operand, (P) *Debugger*, 8-19
- optimized code, (P) *Debugger*, 3-25, 11-8, 13-1
- queue, (P) *Concepts*, 14-14
- SET SCOPE/CURRENT command, (P) *Debugger*, 11-10
- window, (P) *Debugger*, 3-25
- %INST_SCOPE, (P) *Debugger*, 11-9
- Inswapping
- reducing rate, (S) *VAX Perform*, 5-10; (S) *Alpha Perform*, 17-9
- Integer and floating-point routines, (P) *Concepts*, 6-12

- Integer overflow, (P) *LIB\$*, LIB-281
- Integer register usage, (P) *Interfaces*, 2-2; (P) *Calling Std*, 3-1
- Integers
- See Numbers
- Integer types, (P) *Debugger*, 3-14, 8-15, 8-25, 8-27
- Integrated storage elements
- See ISEs
- Integrating procedures, (P) *Modular Proc*, 5-1
- Integration
- data, (G) *SW Overview*, 7-18
- multivendor, (G) *SW Overview*, 1-2, 6-8; (P) *Environment*, 3-2
- Integration testing, (P) *Modular Proc*, 4-1, 4-5
- Interactive accounts, (S) *Security*, 7-4
- Interactive help, (G) *DCL A-M*, DCLI-234
- Interactive identifiers, (S) *Security*, 4-3; (S) *Sys Mgr Essentials*, 11-11
- Interactive logins, (S) *Security*, 3-4
- Interactive mode, (G) *SW Overview*, 1-3; (P) *Rec Mgmt Util*, 1-1, 1-9, 1-16
- Interactive mode processes, (G) *User*, 2-9; (S) *Security*, 3-4
- Interactive processing
- working set limits, (S) *Alpha Perform*, 6-2
- /INTERACTIVE qualifier, (P) *File Appl*, 10-11
- Interactive users
- limiting for performance management, (S) *Sys Mgr Tuning*, 16-4
- limiting in system startup, (S) *Sys Mgr Essentials*, 5-16
- Interchange environment
- protection, (S) *Sys Mgr Essentials*, 8-20
- /INTERCHANGE qualifier
- in Backup utility, (S) *Sys Mgmt Util A-L*, 7-40
- Interconnect devices, (S) *VMScluster Sys*, 1-3
- Interconnect path failures, (S) *Dependable*, 4-11
- Refer also to the *Guidelines for VMScluster Configurations*
- Interconnects
- accessing SCSI storage over, (G) *V6.2 New Feat*, 7-2
- ATM, (G) *V6.2 New Feat*, 8-5
- DS3, (G) *V6.2 New Feat*, 3-7, 8-5
- FDDI, (G) *V6.2 New Feat*, 8-4
- in VMScluster configurations
- Refer to the *Guidelines for VMScluster Configurations*
- SCSI, (G) *V6.2 New Feat*, 3-6, 7-1
- troubleshooting SCSI, (G) *V6.2 New Feat*, 7-33
- Interconnect support, (G) *Compatibility*, 2-4
- Interface Definition Language
- See IDL

- Interfaces to POLYCENTER Software Installation utility
 - DCL, (S) *Sys Mgr Essentials*, 3-18
 - DECwindows Motif, (S) *Sys Mgr Essentials*, 3-18
- Interfaces to the Backup utility, (S) *Sys Mgr Essentials*, 10-4
- Interfacing with application users, (S) *Dependable*, 8-50
- Interlocked instructions, (P) *Concepts*, 14-6, 14-9, 14-13
- Interlocked queues
 - validating, (P) *Alpha SDA*, SDA-160; (P) *VAX SDA*, SDA-185
- Intermittent failures
 - in hardware components, (S) *Dependable*, 9-12
- Internal buffers, (P) *File Appl*, 8-3
- Internal clock, (S) *DECnet Mgmt Util*, 3-77
- Internal errors, reporting, (P) *DECthreads*, 3-9
- Internal file access blocks
 - See IFABs
- Internal file identifiers
 - See IFIs
- Internal record access blocks
 - See IRABs
- Internal values
 - CPU-specific page units for some system parameters
 - on Alpha systems, (S) *Comparison*, 5-3
- International Organization for Standardization
 - See ISO
- International standards
 - OpenVMS support, (P) *Environment*, 2-2
- International Telegraph and Telephone Consultative Committee
 - See CCITT
- Internet, (G) *V6.2 New Feat*, 3-23; (G) *SW Overview*, 1-11, 6-7; (S) *Sys Mgr Tuning*, 21-13
 - accounts for Alpha systems, (G) *Compatibility*, 3-10
 - addressing, (S) *TCP/IP*, 2-6, 2-7
 - Alpha Applications Catalog, (G) *Compatibility*, 3-3
 - backbone, (S) *TCP/IP*, 1-6
 - connectivity, (S) *TCP/IP*, 1-7
 - definition, (S) *TCP/IP*, 1-1
 - Digital Learning Services catalog, (G) *Compatibility*, 3-8
 - gateways, (S) *TCP/IP*, 1-3
 - global, (S) *TCP/IP*, 1-4
 - Gopher service, (S) *TCP/IP*, 3-5
 - information retrieval tools, (S) *TCP/IP*, 3-4
 - layers, (S) *TCP/IP*, 2-2, 2-3, 2-5
 - mailing lists, (S) *TCP/IP*, 3-6
 - mail messages, (S) *TCP/IP*, 3-6
 - newsgroups, (S) *TCP/IP*, 3-6
- Internet (cont'd)
 - scope, (S) *TCP/IP*, 1-6
 - UseNet protocol, (S) *TCP/IP*, 3-6
 - World Wide Web, (S) *TCP/IP*, 3-5
- Internet address
 - specifying in Mail, (G) *V6.2 New Feat*, 2-5
- Internet Engineering Task Force
 - See IETF
- Internetworking, (S) *TCP/IP*, 1-4
- Interoperability
 - applications, (S) *TCP/IP*, 1-2
 - database, (G) *SW Overview*, 7-18
 - in mixed-architecture VMScluster system, (G) *Compatibility*, 4-15
 - multivendor, (G) *SW Overview*, 2-5
 - of native Alpha and translated images, (G) *Compatibility*, 3-8
 - on a network, (G) *Compatibility*, 2-1
 - TCP/IP*, (S) *TCP/IP*, 1-2
- Interpreters, (G) *SW Overview*, 4-5
- Interprocess communication, (G) *SW Overview*, 3-3; (S) *VMScluster Sys*, 6-24; (P) *Concepts*, 2-1, 2-7
 - event flags, (P) *Concepts*, 2-8
 - global sections, (P) *Concepts*, 2-8
 - lock management services, (P) *Concepts*, 2-8
 - logical names, (P) *Concepts*, 2-8
 - mailboxes, (P) *Concepts*, 2-8
 - using, (P) *Concepts*, 2-8
- Interprocess control, (P) *Concepts*, 2-1
- Interrecord gap
 - See IRG
- INTERRUPT command, (S) *DECnet Mgmt Util*, 4-11
- Interrupt dispatch blocks
 - See IDBs
- Interrupt handler
 - inserting a queue element from, (P) *DECthreads*, cmalib-15
- Interruption
 - command execution, (P) *Debugger*, 2-6, 5-11
 - debugging session, (P) *Debugger*, 5-11
 - program execution, (P) *Debugger*, 2-6, 2-7, 5-11, 5-13, 14-6, 14-9, 14-13
- Interrupt priority level, (P) *Concepts*, 14-7
- /INTERRUPT qualifier, (P) *Alpha SDA*, SDA-151; (P) *VAX SDA*, SDA-177
- Interrupts, (P) *DECthreads*, pthread-31, cma-34
 - reducing, (S) *VAX Perform*, 5-15, 5-17
- Interrupt stack
 - displaying contents, (P) *VAX SDA*, SDA-177
 - excessive activity, (S) *VAX Perform*, 4-33
 - excessive time, (S) *VAX Perform*, 4-31
- Interrupt state, (S) *Alpha Perform*, 9-7, 9-8
 - excessive activity, (S) *Alpha Perform*, 15-2
 - VMScluster systems, (S) *Alpha Perform*, 9-8
 - remote nodes, (S) *Alpha Perform*, 9-7

- Interrupt tests, (S) *DECnet Mgmt Util*, 4-11
 - types of, (S) *DECnet Mgmt Util*, 4-12
- /INTERVAL qualifier, (S) *Sys Mgmt Util M-Z*, 4-8
- INT key types, (P) *Rec Mgmt Util*, 4-30
- Intraprocess communication, (P) *Concepts*, 2-1
 - common area, (P) *Concepts*, 2-6
 - global symbols, (P) *Concepts*, 2-5
- Intruder fix, (S) *DECamds*, 4-2
- Intrusion attempts, (S) *Security*, 3-9
- Intrusion databases, (S) *Security*, 7-27; (S) *Sys Mgr Essentials*, 11-7
- Intrusion detection, (S) *Security*, 7-26
 - counteraction through dual passwords, (S) *Security*, 7-15
 - database, (S) *Security*, 7-27
 - evasive procedures, (S) *Security*, 3-9
 - reporting events, (S) *Security*, 3-19
 - system parameters for, (S) *Security*, 7-28
- Intrusion records
 - deleting, (P) *Sys Svc I*, SYS1-181
- Intrusions
 - detection and evasion, (S) *Sys Mgr Essentials*, 11-6
 - returning information about (VAX only), (P) *Sys Svc II*, SYS2-299
 - scanning for, (P) *Sys Svc II*, SYS2-223
- Intrusion services
 - managed by security server, (S) *Sys Mgr Essentials*, 5-5
- INT suffix on DECthreads routines, (P) *DECthreads*, B-1
- Investigating low memory cause, (S) *DECamds*, 4-7
- Investing
 - in system planning, (S) *Dependable*, 3-5
- Investment protection
 - hardware, (G) *Compatibility*, 3-7
 - software, (G) *Compatibility*, 3-7
- INVEXCEPTN bugcheck, (P) *Alpha SDA*, SDA-19; (P) *VAX SDA*, SDA-21
- Invocation context
 - access routines, (P) *Calling Std*, 3-34; (P) *LIB\$*, LIB-222, LIB-238, LIB-239, LIB-243, LIB-244, LIB-343
 - functions, (P) *Calling Std*, 3-34; (P) *LIB\$*, LIB-222, LIB-238, LIB-239, LIB-243, LIB-244, LIB-343
 - obtaining handle, (P) *Calling Std*, 3-35; (P) *LIB\$*, LIB-239
 - updating, (P) *Calling Std*, 3-36; (P) *LIB\$*, LIB-343
- Invocation context blocks
 - See ICBs
- Invocation handles, (P) *Interfaces*, B-10; (P) *Calling Std*, 3-30
 - creating, (P) *Calling Std*, 3-33
 - encoding, (P) *Calling Std*, 3-30
 - format for procedure, (P) *Calling Std*, 3-30
- Invoking ANALYZE/DISK_STRUCTURE, (S) *Sys Mgmt Util A-L*, 3-6
- Invoking AUTOGEN, (S) *Sys Mgr Tuning*, 14-9
- Invoking debugger, (P) *Debugger*, 2-1, 5-7, 14-1, 14-13
- Invoking NCP, (S) *DECnet Mgmt Util*, 1-1
- Invoking SDA automatically, (S) *Sys Mgr Tuning*, 15-11
- Invoking SDA by default, (P) *Alpha SDA*, SDA-6
- Invoking SYSMAN
 - privilege requirements, (S) *Sys Mgmt Util M-Z*, 6-5
- invo_context_blk data type, (P) *Interfaces*, B-10
- invo_handle data type, (P) *Interfaces*, B-10
- IO\$M_LT_QUE_CHG_NOTIF
 - LAT \$QIO Function Modifier, (P) *I/O User*, 5-76
- IO\$M_NOW modifier
 - for Get and Put services, (P) *RMS Ref*, 6-16
- IO\$M_ROUTE functional modifier, (P) *I/O User*, 9-46
- IO\$M_SENSE_MAC
 - Used with IO\$_SENSEMODE, (P) *I/O User*, 9-49
- IO\$M_SENSE_MAC functional modifier, (P) *I/O User*, 9-49
- IO\$M_SHOW_MAP
 - Used with IO\$_SENSEMODE, (P) *I/O User*, 9-51
- IO\$M_SHOW_MAP functional modifier, (P) *I/O User*, 9-51
- IO\$M_SHOW_ROUTE
 - Used with IO\$_SENSEMODE, (P) *I/O User*, 9-51
- IO\$M_SHOW_ROUTE functional modifier, (P) *I/O User*, 9-51
- IO\$M_UPDATE_MAP functional modifier, (P) *I/O User*, 9-44
- IO\$_M_SET_MAC functional modifier, (P) *I/O User*, 9-43
- IO\$_SETMODE
 - IO\$M_UPDATE_MAP, (P) *I/O User*, 9-44
- IO AUTOCONFIGURE command
 - in SYSMAN, (S) *Sys Mgr Essentials*, 7-6, 7-8; (S) *Sys Mgmt Util M-Z*, 6-33
 - in system startup, (S) *Sys Mgr Essentials*, 5-4, 5-7, 7-6
- IO CONNECT command
 - in SYSMAN, (S) *Sys Mgr Essentials*, 7-8; (S) *Sys Mgmt Util M-Z*, 6-34
 - in system startup, (S) *Sys Mgr Essentials*, 5-7
- IODEF.STB file, (P) *Alpha SDA*, SDA-15
- IOGEN Configuration Building Module, (S) *Sys Mgmt Util M-Z*, 6-38, 6-39, 6-42
- IO LOAD command
 - in SYSMAN, (S) *Sys Mgr Essentials*, 7-8; (S) *Sys Mgmt Util M-Z*, 6-37

- IOSBs (I/O status blocks), (P) *Interfaces*, B-10
 - disk, (P) *I/O User*, 2-38
 - in synchronization, (P) *Concepts*, 9-13
 - LAN drivers, (P) *I/O User*, 9-53
 - LAT port driver, (P) *I/O User*, 5-80
 - magnetic tape, (P) *I/O User*, 3-23
 - mailbox, (P) *I/O User*, 4-15
 - return condition value field, (P) *Concepts*, 9-23
 - returned by generic SCSI class driver, (P) *I/O User*, 8-10
 - terminal, (P) *I/O User*, 5-80
- IOSBs (I/O status blocks)
 - ACP-QIO interface, (P) *I/O User*, 1-36
- IOSEGMENT= option, (P) *Linker*, LINK-56
- IO SET commands
 - in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-38
- IO SHOW commands
 - in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-39; (S) *Comparison*, A-7 to A-10
- IO_ROUTINES.EXE file
 - global symbols, (P) *VAX SDA*, SDA-64
- IO_ROUTINES.STB file
 - global symbols, (P) *Alpha SDA*, SDA-61
- io_status_block data type, (P) *Interfaces*, B-10
- IP (Internet Protocol), (S) *TCP/IP*, 2-3, 2-5
 - routing, (S) *TCP/IP*, 2-6
- IPC (Interrupt Priority C)
 - using to cancel mount verification, (S) *Sys Mgr Essentials*, 8-63
- IPL\$ _ASTDEL file
 - PGFIPLHI bugcheck, (P) *Alpha SDA*, SDA-27
- IPL\$ _ASTDEL value
 - PGFIPLHI bugcheck, (P) *VAX SDA*, SDA-23
- IPL (interrupt priority level), (S) *DECamsds*, 1-2
- IPL register
 - displaying, (P) *Alpha SDA*, SDA-87
- IPL symbol, (P) *Alpha SDA*, SDA-16
- IPX protocols, (G) *SW Overview*, 6-25
- IRABs (internal record access blocks), (P) *Alpha SDA*, SDA-75; (P) *VAX SDA*, SDA-80
- IRG (interrecord gap), (S) *Sys Mgr Essentials*, 8-6; (P) *File Appl*, 1-16
- IRP (I/O request packet), (P) *Alpha SDA*, SDA-94; (P) *VAX SDA*, SDA-105
- IRP symbol, (P) *VAX SDA*, SDA-18
- IRUs (independently recoverable units)
 - performance characteristics, (S) *Dependable*, 4-3 to 4-12
- ISA devices
 - configuring, (G) *V6.2 New Feat*, 4-3 to 4-5
- ISD_MAX= option, (P) *Linker*, LINK-57
 - controlling demand-zero compression, (P) *Linker*, 3-25
- ISEs
 - peripherals, (S) *VMScluster Sys*, 3-3
 - use in VMScluster, (S) *VMScluster Sys*, 1-3
- ISL (Initial System Load), (S) *Sys Mgr Tuning*, 23-2
- isnan routine, (P) *Portable Math*, DPML-39, B-8
- ISO (International Organization for Standardization), (G) *SW Overview*, 6-3, 6-10, A-1; (S) *TCP/IP*, 2-1
 - standards, (G) *SW Overview*, 2-2
- ISO 9660 standard
 - data interleaving, (S) *Sys Mgr Essentials*, 8-6
 - establishing default file attributes, (S) *Sys Mgr Essentials*, 8-24
- format
 - definition, (S) *Sys Mgr Essentials*, 8-4
- groups
 - mounting, (S) *Sys Mgr Essentials*, 8-34
- media
 - showing device information, (S) *Sys Mgr Essentials*, 7-5
- media protection, (S) *Sys Mgr Essentials*, 8-17
- mounting a volume for, (S) *Sys Mgr Essentials*, 8-23
- resolution of incompatibilities with OpenVMS, (P) *File Appl*, 1-12
- restrictions, (S) *Sys Mgr Essentials*, 8-36
- standard on OpenVMS, (S) *Sys Mgr Essentials*, 8-5
- UNDEFINED record format errors, (S) *Sys Mgr Essentials*, 8-36
- volume label and volume set label duplication, (S) *Sys Mgr Essentials*, 8-36
- volume labels, (S) *Sys Mgr Essentials*, 8-36
- volume set labels, (S) *Sys Mgr Essentials*, 8-36
- volume sets
 - mounting, (S) *Sys Mgr Essentials*, 8-34
 - partially mounted, (S) *Sys Mgr Essentials*, 8-35
 - volume structure, (S) *Sys Mgr Essentials*, 8-3
- Isolating VMScluster traffic data, (S) *VMScluster Sys*, F-28
- Itemlist read operations, (P) *I/O User*, 5-31
- Item lists, (P) *RMS Ref*, 17-1
 - with ACL editor routine, (P) *Util Routines*, ACL-3
 - with DECTPU routines, (P) *Util Routines*, DECTPU-62
- item_list_2 data type, (P) *Interfaces*, B-11
- item_list_3 data type, (P) *Interfaces*, B-11
- item_list_pair data type, (P) *Interfaces*, B-12
- item_quota_list data type, (P) *Interfaces*, B-12
- Iterations
 - definition, (G) *User*, 15-7
- Iterative translations
 - See Logical names and translations

J

- j0 routine, (P) *Portable Math*, DPML-11, B-9
j1 routine, (P) *Portable Math*, DPML-11, B-9
Jacket routines, (P) *Concepts*, 6-1
 compiling code with, (P) *DECthreads*, A-4
 link-time considerations, (P) *Linker*, LINK-21
Japanese Industrial Standards Committee
 See JISC
JFBs (journaling file blocks), (P) *Alpha SDA*, SDA-75; (P) *VAX SDA*, SDA-80
JIBs (job information blocks), (P) *Alpha SDA*, SDA-16, SDA-129; (P) *VAX SDA*, SDA-151
JIB symbol, (P) *Alpha SDA*, SDA-16; (P) *VAX SDA*, SDA-18
JISC (Japanese Industrial Standards Committee), (G) *SW Overview*, 7-16, A-1
JMP instruction
 in transfer vectors, (P) *Linker*, 4-6
jn routine, (P) *Portable Math*, DPML-11, B-9
Job banner pages, (S) *Sys Mgr Essentials*, 13-42, 13-60
Job batch cards
 end of, (G) *DCL A-M*, DCLI-208
\$JOB card, (S) *Sys Mgr Essentials*, 7-17
JOB card password, (G) *DCL N-Z*, DCLII-10
JOB command, (G) *DCL A-M*, DCLI-277 to DCLI-282
Job controllers
 See also Distributed job controller and Queue managers
 affected by shift restrictions, (G) *User*, 2-12; (S) *Security*, 3-8
 and batch jobs, (S) *Sys Mgr Essentials*, 12-3, 13-2
 asynchronous, (P) *Sys Svc II*, SYS2-305
 communication with queue manager, (S) *Sys Mgr Essentials*, 12-3
 enforcing work time restrictions, (S) *Security*, 7-2
 function, (P) *Util Routines*, PSM-4
 relationship to queue manager, (S) *Sys Mgr Essentials*, 12-3, 12-7
 request to symbiont, (P) *Util Routines*, SMB-5
 starting queue manager, (S) *Sys Mgr Essentials*, 12-6, 12-7
 synchronous, (P) *Sys Svc II*, SYS2-362
 tasks performed by, (S) *Sys Mgr Essentials*, 12-3
JOBCTL process
 creation during system startup, (S) *Sys Mgr Essentials*, 5-5
Job information blocks
 See JIBs
Job logical name tables, (P) *Concepts*, 10-5
 canceling entries, (G) *DCL A-M*, DCLI-107
 including logical name, (G) *DCL A-M*, DCLI-42, DCLI-117
Job quotas in use, (S) *DECamds*, 3-25
Job retention
 changing for a job, (S) *Sys Mgr Essentials*, 13-74
 determining, (G) *DCL N-Z*, DCLII-21, DCLII-139, DCLII-411
 specifying for a job, (S) *Sys Mgr Essentials*, 13-26
 specifying for a queue, (S) *Sys Mgr Essentials*, 13-26
Jobs
 See also Batch jobs and Output jobs
 changing scheduling priority, (S) *Sys Mgr Essentials*, 13-72
 controlling print position and alignment, (S) *Sys Mgr Essentials*, 13-75, 13-77
 defining CPU time limit, (G) *DCL A-M*, DCLI-263; (G) *DCL N-Z*, DCLII-197, DCLII-369
 deleting, (S) *Sys Mgr Essentials*, 13-74
 deleting from queue, (G) *DCL A-M*, DCLI-136, DCLI-143
 executing in batch mode on remote nodes, (S) *DECnet Intro*, 2-12
 getting information asynchronously, (P) *Sys Svc I*, SYS1-346; (P) *Sys Svc II*, SYS2-3
 getting information synchronously, (P) *Sys Svc I*, SYS1-366; (P) *Sys Svc II*, SYS2-46
 holding, (S) *Sys Mgr Essentials*, 13-71, 13-79
 merging, (S) *Sys Mgr Essentials*, 13-56
 modifying, (S) *Sys Mgr Essentials*, 13-70
 moving from one queue to another, (S) *Sys Mgr Essentials*, 13-57
 redirecting to another queue, (G) *DCL A-M*, DCLI-46
 releasing, (S) *Sys Mgr Essentials*, 13-71
 removing from queue
 with ASSIGN/MERGE command, (G) *DCL A-M*, DCLI-46
 requeuing
 executing, (S) *Sys Mgr Essentials*, 13-73
 pending, (S) *Sys Mgr Essentials*, 13-73
 retaining in a queue, (S) *Sys Mgr Essentials*, 13-74
 suspending, (S) *Sys Mgr Essentials*, 13-75
Job scheduling, (G) *SW Overview*, 3-2; (S) *Sys Mgr Essentials*, 13-32, 13-72
 for output jobs, (S) *Sys Mgr Essentials*, 13-32
 priority
 See Priority job scheduling
Job status
 definitions, (S) *Sys Mgr Essentials*, 13-69

Job status (cont'd)
 error, (S) *Sys Mgr Essentials*, 13-26, 13-31, 13-54, 13-74
 holding, (S) *Sys Mgr Essentials*, 13-71, 13-79
 pending, (S) *Sys Mgr Essentials*, 13-73, 13-74, 13-79
 retained, (S) *Sys Mgr Essentials*, 13-71, 13-74
 showing, (S) *Sys Mgr Essentials*, 13-26, 13-68
 use in job retention, (S) *Sys Mgr Essentials*, 13-26
 Job table quota, (S) *Sys Mgr Essentials*, 6-43
 Job terminations
 imposed by shift restrictions, (G) *User*, 2-12; (S) *Security*, 3-8
 Job trees
 definition, (G) *User*, 18-4
 JOB_CONTROL process, (S) *DECamsd*s, 4-6
 Journal file of queue database, (S) *Sys Mgr Essentials*, 12-4
 location, (S) *Sys Mgr Essentials*, 12-6, 12-7
 changing, (S) *Sys Mgr Essentials*, 12-6
 Journaling
 not supported error message, (P) *Rec Mgmt Util*, 1-7
 Journaling file blocks
 See JFBs
 Journaling flags
 FAB symbolic offsets, (P) *RMS Ref*, 4-20
 /JOURNAL qualifier
 in Backup utility, (S) *Sys Mgmt Util A-L*, 7-40
 JSB call format, (P) *Interfaces*, 1-4
 JSB entry points, (P) *Modular Proc*, 2-10, A-1; (P) *MTH\$*, 1-2
 /JSB qualifier, (P) *Debugger*, 7-9
 JSR instruction
 calculating hints for, (P) *Linker*, 1-16, LINK-25, B-41
 replacing with the BSR instruction, (P) *Linker*, 1-15, LINK-25
 JTQUOTA process quota, (S) *Sys Mgr Essentials*, 6-43

K

KDA50 disk controller, (P) *I/O User*, 2-2
 KDB50 disk controller, (P) *I/O User*, 2-2
 KDC (Key Distribution Center), (G) *SW Overview*, 6-7
 Kept Debugger, (G) *DCL A-M*, DCLI-111
 Kerberos authentication, (S) *TCP/IP*, 3-2, 3-3, 5-2
 Kernel mode, (S) *Alpha Perform*, 9-7, 9-8
 calling images running in, (S) *Sys Mgr Tuning*, 16-11, 16-14
 changing to, (P) *Sys Svc I*, SYS1-112
 excessive time, (S) *VAX Perform*, 4-31; (S) *Alpha Perform*, 14-5
 logical names, (S) *Sys Mgr Tuning*, 16-15

/KERNEL qualifier, (P) *Alpha SDA*, SDA-151; (P) *VAX SDA*, SDA-177
 Kernel stacks
 displaying contents, (P) *Alpha SDA*, SDA-151; (P) *VAX SDA*, SDA-177
 pointer, (P) *Alpha SDA*, SDA-15; (P) *VAX SDA*, SDA-18
 Kernel threads
 effects of context switching, (P) *DECthreads*, 3-1
 Key 0, (P) *File Appl*, 3-20
 KEY attribute, (P) *Rec Mgmt Util*, 6-1
 Key bindings
 customizing, (P) *Debugger*, 3-35
 Keyboard control character, (P) *I/O User*, 5-4 to 5-7, 5-9
 Key buffers, (P) *File Appl*, 8-3, 9-12, 9-16
 Key-characteristics option, (P) *File Appl*, 4-33
 Key compression
 front, (P) *File Appl*, 3-19
 prohibition against using, (P) *File Appl*, 4-8
 rear, (P) *File Appl*, 3-19
 restrictions, (P) *File Appl*, 3-2, 3-19, 3-26
 Key definitions
 assigning, (G) *User*, 3-17
 KEY DESCRIPTOR structure, (P) *File Appl*, 10-16
 how updated by Convert utility, (P) *Rec Mgmt Util*, 2-9
 Key Distribution Center
 See KDC
 Key matches, (P) *File Appl*, 8-12 to 8-14
 determining method, (P) *RMS Ref*, 6-5
 types, (P) *RMS Ref*, 6-5
 KEY NULL_VALUE attribute, (P) *Rec Mgmt Util*, 4-28
 Key options
 comparing primary and alternate keys, (P) *RMS Ref*, 12-7
 Keypad applications
 setting for DECterm, (G) *DCL A-M*, DCLI-100
 Keypad definitions, (S) *Sys Mgr Tuning*, 20-5, 20-7; (S) *Sys Mgmt Util M-Z*, 4-4, 4-53
 SHOW CLUSTER, (S) *Sys Mgmt Util M-Z*, B-1
 Keypad editing
 editing commands, (S) *Sys Mgmt Util A-L*, A-1
 for ACL editor, (S) *Sys Mgmt Util A-L*, A-1
 LK201-specific editing commands, (S) *Sys Mgmt Util A-L*, A-5
 Keypad mode, (P) *Debugger*, 12-8, A-1
 Keypads
 default in Mail, (G) *User*, 6-20
 defining in Mail, (G) *User*, 6-21
 reading from, (P) *Concepts*, 7-25

KEY primary sections

ordering requirement, (P) *Rec Mgmt Util*, 6-1

KEY PROLOG attribute, (P) *Rec Mgmt Util*,
2-14, 4-26, 4-27

/KEY qualifier, (P) *Rec Mgmt Util*, 3-3; (P) *Alpha SDA*, SDA-42; (P) *VAX SDA*, SDA-49

Keys

arrow

recalling commands, (G) *User*, 3-19

defining as simple or segmented, (P) *RMS Ref*,
12-12

defining for SDA, (P) *VAX SDA*, SDA-48

length, (P) *Rec Mgmt Util*, 4-27

Keys (in records)

alternate, (P) *Rec Mgmt Util*, 1-6, 4-5, 4-28;

(P) *File Appl*, 3-18, 3-19, 3-23

duplicate values, (P) *File Appl*, 2-20

example of updating a record, (P) *RMS Ref*,
A-31

example of use in finding and deleting record,
(P) *RMS Ref*, A-31

for Prolog 1 files and Prolog 2 files, (P) *File Appl*, 3-19

multiple, (P) *Rec Mgmt Util*, 2-18

multiple, example with Close service, (P) *RMS Ref*, A-23

multiple, performance cost, (P) *RMS Ref*,
12-13

multiple, recommended number, (P) *RMS Ref*, 12-13

null, (P) *Rec Mgmt Util*, 4-28

null value, (P) *File Appl*, 2-20

number of, (P) *File Appl*, 3-23

primary, (P) *File Appl*, 3-20, 3-23

segmented, (P) *File Appl*, 3-20

segment length, (P) *Rec Mgmt Util*, 4-29

selecting path, (P) *RMS Ref*, A-23

size, (P) *File Appl*, 9-12, 9-14, 9-16

storing indexed records sequentially, (P) *File Appl*, 2-5

types, (P) *Rec Mgmt Util*, 4-29

Keys (keyboard)

arrow

recalling commands, (G) *User*, 3-14

commonly used Ctrl keys, (G) *User*, 3-3

controlling cursor position, (G) *User*, 3-19

controlling screen display, (G) *User*, 3-20

Ctrl key sequences, (G) *User*, 3-2

debugger predefined, (P) *Debugger*, 6-2, 14-16

defining, (G) *User*, 3-17; (S) *Sys Mgmt Util M-Z*, 6-19; (P) *Debugger*, 12-8

defining for SDA, (P) *Alpha SDA*, SDA-42

defining in LATCP, (S) *Sys Mgmt Util A-L*,
13-17

defining in Mail, (G) *User*, 6-20

defining in SYSMAN, (S) *Sys Mgmt Util M-Z*,
6-3

deleting definitions, (P) *Debugger*, 12-9

Keys (keyboard) (cont'd)

displaying definitions, (S) *Sys Mgmt Util M-Z*,
6-57; (P) *Debugger*, 12-8

entering DCL commands, (G) *User*, 3-18

interrupting DCL commands, (G) *User*, 3-18

predefined debugger, (P) *Debugger*, A-1

recalling DCL commands, (G) *User*, 3-19

Keys (product authorization)

See PAKs

Keys in record

size restriction for string type, (P) *RMS Ref*,
12-14

Keys of reference, (P) *Rec Mgmt Util*, 2-12; (P)
File Appl, 2-5

establishing, (P) *RMS Ref*, RMS-50

Key state, (P) *Debugger*, 12-8, A-1

Key string buffers

program example, (P) *RMS Ref*, A-27

Key string descriptors

program example, (P) *RMS Ref*, A-27

Key string lengths

program example, (P) *RMS Ref*, A-27

Key tables

reading from, (P) *Concepts*, 7-28

Key values

generating for per-thread context, (P)

DECthreads, pthread-49, cma-45

obtaining per-thread context for, (P)

DECthreads, pthread-46, cma-47

setting per-thread context for, (P) *DECthreads*,
pthread-74, cma-48

Keyword paths

obtaining values of command string keywords,
(P) *Util Routines*, CLI-9

referencing command string keywords, (P) *Util Routines*, CLI-12

Keywords

abbreviating, (P) *Rec Mgmt Util*, 6-2

in DCL command lines, (G) *User*, 3-4

SOURCE attribute, (P) *Rec Mgmt Util*, 4-36

TARGET attribute, (P) *Rec Mgmt Util*, 4-37

KEY_GREATER_EQUAL attribute, (P) *Rec Mgmt Util*, 4-10; (P) *File Appl*, 8-8, 8-9

KEY_GREATER_THAN attribute, (P) *Rec Mgmt Util*, 4-10; (P) *File Appl*, 8-8, 8-9

KEY_LIMIT attribute, (P) *Rec Mgmt Util*, 4-11

KEY_NCMPR option, (P) *Rec Mgmt Util*, 4-26

KEY_OF_REFERENCE attribute, (P) *Rec Mgmt Util*, 4-11

KFE52 Ethernet device, (S) *DECnet Mgmt*, 2-10

KFQSA adapter, (P) *I/O User*, 2-3

KGE option, (P) *Rec Mgmt Util*, 4-10

Kit location, (S) *DECams*, A-1

Kits

See Software products

Kitting shareable images, (P) *Linker*, LINK-15
controlling universal symbol declarations, (P) *Linker*, 4-10

Known file lists, (S) *Sys Mgmt Util A-L*, 11-3
definition, (S) *Sys Mgr Tuning*, 16-10
image look up, (P) *File Appl*, 5-5
in system startup, (S) *Sys Mgr Essentials*, 5-12

Known images, (S) *Sys Mgmt Util A-L*, 11-3
adding, (S) *Sys Mgmt Util A-L*, 11-5
attributes of, (S) *Sys Mgmt Util A-L*, 11-14
creating, (S) *Sys Mgmt Util A-L*, 11-8
definition, (S) *Sys Mgr Tuning*, 16-10
deleting, (S) *Sys Mgr Tuning*, 16-18; (S) *Sys Mgmt Util A-L*, 11-10
dismounting volume, (S) *Sys Mgr Tuning*, 16-18
displaying, (S) *Sys Mgr Tuning*, 16-16
evaluating merits of installing, (S) *Sys Mgr Tuning*, 16-15, 16-16; (S) *Sys Mgmt Util A-L*, 11-13
file specification for, (S) *Sys Mgr Tuning*, 16-16
installing, (S) *Sys Mgr Tuning*, 16-16; (S) *Alpha Perform*, 1-5
in system startup, (S) *Sys Mgr Essentials*, 5-12; (S) *Sys Mgr Tuning*, 16-10
privilege enhancement, (S) *Sys Mgr Tuning*, 16-13
removing, (S) *Sys Mgr Tuning*, 16-18; (S) *Sys Mgmt Util A-L*, 11-7, 11-18
replacing, (S) *Sys Mgmt Util A-L*, 11-18
resident, (S) *Sys Mgr Tuning*, 16-12
updating, (S) *Sys Mgmt Util A-L*, 11-18

KNOWN reserved word
plural form of component name, (S) *DECnet Intro*, 3-33, 4-2

KSP symbol, (P) *Alpha SDA*, SDA-15; (P) *VAX SDA*, SDA-18

L

/L1 qualifier, (P) *Alpha SDA*, SDA-112
/L2 qualifier, (P) *Alpha SDA*, SDA-112
/L3 qualifier, (P) *Alpha SDA*, SDA-112
%LABEL built-in symbol, (P) *Debugger*, 7-6, B-7
Label descriptors, (P) *Calling Std*, 5-23
/LABEL qualifier
in Backup utility, (S) *Sys Mgmt Util A-L*, 7-42
in Mount utility, (S) *Sys Mgmt Util M-Z*, 2-23

Labels
ANSI magnetic tape, (P) *File Appl*, 1-17, 1-20
backup tape, (S) *Sys Mgr Essentials*, 10-21
changing volume, (S) *Sys Mgr Essentials*, 3-33
command interpreter rules for, (G) *DCL A-M*, DCLI-52, DCLI-227, DCLI-229
disk, (S) *Sys Mgmt Util M-Z*, 2-4
disk volume set, (S) *Sys Mgmt Util M-Z*, 2-5
duplicate in command procedures, (G) *User*, 15-5

Labels (cont'd)

EOF (end-of-file), (P) *File Appl*, 1-32
EOV (end-of-volume), (P) *File Appl*, 1-32
HDR1, (P) *File Appl*, 1-26
HDR2, (P) *File Appl*, 1-29
HDR3, (P) *File Appl*, 1-32
HDR4, (P) *File Appl*, 1-32
header, (S) *Sys Mgr Essentials*, 8-24; (P) *File Appl*, 1-25
in command procedures, (G) *User*, 3-4, 15-4; (G) *DCL A-M*, DCLI-52, DCLI-227, DCLI-229
initializing volume to write, (S) *Sys Mgr Essentials*, 8-11
in local symbol tables, (G) *User*, 15-4
ISO, (P) *File Appl*, 1-17
magnetic tape, (S) *Sys Mgmt Util M-Z*, 2-4
magnetic tape volume set, (S) *Sys Mgmt Util M-Z*, 2-5
specifying for volumes, (G) *DCL N-Z*, DCLII-236
trailer, (S) *Sys Mgr Essentials*, 8-7; (P) *File Appl*, 1-32
VOL1, (P) *File Appl*, 1-22
volume header, (G) *DCL A-M*, DCLI-248
writing on volume, (G) *DCL A-M*, DCLI-248

LAD (local area disk), (G) *SW Overview*, 1-6
protocols, (G) *SW Overview*, 6-8
LAD Control Program (LADCP) utility, (G) *SW Overview*, 3-13; (S) *Sys Mgr Tuning*, 23-13 to 23-14
supported on Alpha systems, (S) *Comparison*, 2-5

LAN
polling, (S) *DECamds*, 5-15
setting load, (S) *DECamds*, 5-16

LANACP (Local Area Network Auxiliary Control Program)
See LANACP LAN Server process
LANACP LAN Server process, (S) *Sys Mgmt Util A-L*, 12-3
SET ACP command, (S) *Sys Mgmt Util A-L*, 12-21

LANACP utility
See LAN Auxiliary Control Program utility

LAN adapters
BYE datagram, (S) *VMScluster Sys*, F-24
capturing traffic data on, (S) *VMScluster Sys*, F-29
datagram flags, (S) *VMScluster Sys*, F-25
overloaded, (S) *VMScluster Sys*, F-12
selecting, (S) *VMScluster Sys*, 4-8
sending CCSTART datagram, (S) *VMScluster Sys*, F-17, F-24
sending HELLO datagrams, (S) *VMScluster Sys*, F-17, F-24
stopping, (S) *VMScluster Sys*, C-39, E-3

LAN adapters (cont'd)

- stopping NISCA protocol, (S) *VMScluster Sys*, D-2
 - using multiple, (S) *VMScluster Sys*, 3-17
 - VACK datagram, (S) *VMScluster Sys*, F-17, F-24
 - VERF datagram, (S) *VMScluster Sys*, F-17, F-24
- ## LAN addresses, (S) *Sys Mgmt Util A-L*, 13-7
- displaying, (S) *Sys Mgmt Util A-L*, 13-51
- ## LAN analyzers, (S) *VMScluster Sys*, F-20
- analyzing retransmission errors, (S) *VMScluster Sys*, F-36
 - distributed enable filter, (S) *VMScluster Sys*, F-34
 - distributed enable messages, (S) *VMScluster Sys*, F-35
 - distributed trigger filter, (S) *VMScluster Sys*, F-34
 - distributed trigger messages, (S) *VMScluster Sys*, F-35
 - filtering retransmissions, (S) *VMScluster Sys*, F-33
 - filters, (S) *VMScluster Sys*, F-33
 - packet filter, (S) *VMScluster Sys*, F-33
 - partner program, (S) *VMScluster Sys*, F-37
 - scribe program, (S) *VMScluster Sys*, F-38
 - starter program, (S) *VMScluster Sys*, F-36
- ## LAN Auxiliary Control Program (LANACP) utility
- booting cluster satellites with, (G) *V6.2 New Feat*, 3-11
 - clearing counters, (G) *V6.2 New Feat*, 6-22
 - deleting device information, (G) *V6.2 New Feat*, 6-17
 - deleting node information, (G) *V6.2 New Feat*, 6-21
 - device database management, (G) *V6.2 New Feat*, 6-13
 - disabling MOP downline load service, (G) *V6.2 New Feat*, 6-17
 - displaying device information, (G) *V6.2 New Feat*, 6-16
 - displaying node information, (G) *V6.2 New Feat*, 6-20
 - displaying OPCOM messages, (G) *V6.2 New Feat*, 6-23
 - displaying status and counters, (G) *V6.2 New Feat*, 6-21, 6-22
 - enabling MOP downline load service, (G) *V6.2 New Feat*, 6-17
 - Load Trace facility, (G) *V6.2 New Feat*, 6-23
 - MOP downline load service management, (G) *V6.2 New Feat*, 6-21
 - node database management, (G) *V6.2 New Feat*, 6-18
 - OPCOM messages displayed, (G) *V6.2 New Feat*, 6-29; (S) *Sys Mgr Tuning*, 22-22

LAN Auxiliary Control Program (LANACP) utility (cont'd)

- running, (G) *V6.2 New Feat*, 6-27; (S) *Sys Mgr Tuning*, 22-6
- servers, (G) *V6.2 New Feat*, 6-26; (S) *Sys Mgr Tuning*, 22-5
- setting device information, (G) *V6.2 New Feat*, 6-14
- setting node information, (G) *V6.2 New Feat*, 6-18
- stopping, (G) *V6.2 New Feat*, 6-27; (S) *Sys Mgr Tuning*, 22-6

LAN bridges

- use of FDDI priority field, (S) *VMScluster Sys*, 10-17

VMScluster, (S) *VMScluster Sys*, 3-20

LAN controllers

- address, (S) *Sys Mgmt Util A-L*, 13-51
- device name, (S) *Sys Mgmt Util A-L*, 13-8
- physical address, (S) *Sys Mgmt Util A-L*, 13-7

LAN Control Program (LANCP) utility, (G) *V6.2 New Feat*, 6-2; (S) *Sys Mgr Tuning*, 22-6

- booting cluster satellites with, (G) *V6.2 New Feat*, 3-10

- clearing counters, (S) *Sys Mgr Tuning*, 22-25; (S) *Sys Mgmt Util A-L*, 12-9

commands, (S) *Sys Mgmt Util A-L*, 12-7 to 12-41

CLEAR DEVICE, (S) *Sys Mgmt Util A-L*, 12-8

CLEAR MOPDLL, (S) *Sys Mgmt Util A-L*, 12-9

CLEAR NODE, (S) *Sys Mgmt Util A-L*, 12-9

CONNECT NODE, (S) *Sys Mgmt Util A-L*, 12-10

DEFINE DEVICE, (S) *Sys Mgmt Util A-L*, 12-11

DEFINE NODE, (S) *Sys Mgmt Util A-L*, 12-13

@ (Execute Procedure), (S) *Sys Mgmt Util A-L*, 12-7

EXIT, (S) *Sys Mgmt Util A-L*, 12-16

HELP, (S) *Sys Mgmt Util A-L*, 12-16

LIST DEVICE, (S) *Sys Mgmt Util A-L*, 12-17

LIST NODE, (S) *Sys Mgmt Util A-L*, 12-18

PURGE DEVICE, (S) *Sys Mgmt Util A-L*, 12-20

PURGE NODE, (S) *Sys Mgmt Util A-L*, 12-20

SET ACP, (S) *Sys Mgmt Util A-L*, 12-21

SET DEVICE, (S) *Sys Mgmt Util A-L*, 12-22, 12-26

SET NODE, (S) *Sys Mgmt Util A-L*, 12-28

SHOW CONFIGURATION, (S) *Sys Mgmt Util A-L*, 12-31

LAN Control Program (LANCP) utility
commands (cont'd)

SHOW DEVICE, (S) *Sys Mgmt Util A-L*,
12-32
SHOW LOG, (S) *Sys Mgmt Util A-L*, 12-35
SHOW MOPDLL, (S) *Sys Mgmt Util A-L*,
12-37
SHOW NODE, (S) *Sys Mgmt Util A-L*,
12-37
SPAWN, (S) *Sys Mgmt Util A-L*, 12-39
TRIGGER NODE, (S) *Sys Mgmt Util A-L*,
12-40
UPDATE DEVICE, (S) *Sys Mgmt Util A-L*,
12-41
deleting device information, (S) *Sys Mgr
Tuning*, 22-17; (S) *Sys Mgmt Util A-L*,
12-8, 12-20
deleting node information, (S) *Sys Mgr Tuning*,
22-20; (S) *Sys Mgmt Util A-L*, 12-9, 12-20
device database management, (S) *Sys Mgr
Tuning*, 22-14
device management, (G) *V6.2 New Feat*, 6-4;
(S) *Sys Mgr Tuning*, 22-9
disabling MOP downline load service, (S) *Sys
Mgr Tuning*, 22-23
displaying device information, (S) *Sys Mgr
Tuning*, 22-15
displaying node information, (S) *Sys Mgr
Tuning*, 22-18; (S) *Sys Mgmt Util A-L*,
12-18, 12-37
displaying OPCOM messages, (S) *Sys Mgr
Tuning*, 22-25; (S) *Sys Mgmt Util A-L*,
12-21
displaying status and counters, (S) *Sys Mgr
Tuning*, 22-23, 22-24; (S) *Sys Mgmt Util
A-L*, 12-18, 12-37
enabling MOP downline load service, (S) *Sys
Mgr Tuning*, 22-23
exiting, (S) *Sys Mgmt Util A-L*, 12-5
invoking, (S) *Sys Mgmt Util A-L*, 12-4
LAN\$DEVICE_DATABASE.DAT file, (G) *V6.2
New Feat*, 3-10
LAN\$NODE_DATABASE.DAT file, (G) *V6.2
New Feat*, 3-10
load trace facility, (S) *Sys Mgr Tuning*, 22-25
MOP console carrier, (G) *V6.2 New Feat*, 6-24;
(S) *Sys Mgr Tuning*, 22-26; (S) *Sys Mgmt
Util A-L*, 12-10
MOP downline load service management, (S)
Sys Mgr Tuning, 22-23
MOP trigger boot, (G) *V6.2 New Feat*, 6-25;
(S) *Sys Mgr Tuning*, 22-27; (S) *Sys Mgmt
Util A-L*, 12-40
node database management, (S) *Sys Mgr
Tuning*, 22-17
running, (G) *V6.2 New Feat*, 6-3; (S) *Sys Mgr
Tuning*, 22-7

LAN Control Program (LANCP) utility (cont'd)

setting device information, (S) *Sys Mgr Tuning*,
22-15; (S) *Sys Mgmt Util A-L*, 12-11
setting node information, (S) *Sys Mgr Tuning*,
22-18
setting up LAN MOP, (G) *V6.2 New Feat*,
6-29; (S) *Sys Mgr Tuning*, 22-22
SPAWN function, (G) *V6.2 New Feat*, 6-26; (S)
Sys Mgr Tuning, 22-9
using command files, (G) *V6.2 New Feat*, 6-26;
(S) *Sys Mgr Tuning*, 22-9

LANCP (Local Area Network Control Program)

See LAN Control Program (LANCP) utility
LANCP utility (LANCP), (S) *Sys Mgmt Util A-L*,
12-4

LAN drivers

address

destination, (P) *I/O User*, 9-25, 9-28
Ethernet, (P) *I/O User*, 9-5 to 9-6
hardware, (P) *I/O User*, 9-48
loopback assistance, (P) *I/O User*, 9-6
multicast, (S) *Sys Mgr Tuning*, 22-3; (P)
I/O User, 9-5, 9-6, 9-25, 9-35, 9-36
node, (S) *Sys Mgr Tuning*, 22-3; (P) *I/O
User*, 9-5
physical, (S) *Sys Mgr Tuning*, 22-3; (P)
I/O User, 9-5, 9-6, 9-25, 9-36, 9-48
port, (P) *I/O User*, 9-36
shared protocol destination, (P) *I/O User*,
9-33

source, (P) *I/O User*, 9-25

Token Ring, (P) *I/O User*, 9-7

addresses, (S) *Sys Mgr Tuning*, 22-3

AST access mode, (P) *I/O User*, 9-42

AST service routine address, (P) *I/O User*,
9-42

attention AST, (P) *I/O User*, 9-42

buffer

receive, (P) *I/O User*, 9-25, 9-32

channel assignment, (P) *I/O User*, 9-4

characteristics

device, (P) *I/O User*, 9-22, 9-47

extended, (P) *I/O User*, 9-31 to 9-40, 9-48

controller mode, (P) *I/O User*, 9-32

CRC generation, (P) *I/O User*, 9-33

device characteristics, (P) *I/O User*, 9-22, 9-47

drivers

initializing, (P) *I/O User*, 9-4

operating, (P) *I/O User*, 9-4

driver service (802 format), (P) *I/O User*, 9-40

echo mode (DEUNA only), (P) *I/O User*, 9-33

error summary bits, (P) *I/O User*, 9-24

Ethernet, (S) *Sys Mgr Tuning*, 22-2; (P) *I/O
User*, 9-2, 9-3, 9-5, 9-16

Ethernet addresses, (P) *I/O User*, 9-5

Ethernet packet format, (P) *I/O User*, 9-16

Ethernet packet padding, (P) *I/O User*, 9-17

LAN drivers (cont'd)

- exclusive mode on Alpha systems, (P) *I/O User*, 9-21
- exclusive mode on VAX systems, (P) *I/O User*, 9-17
- extended characteristics, (P) *I/O User*, 9-31 to 9-40, 9-47
- FDDI, (S) *Sys Mgr Tuning*, 22-2; (P) *I/O User*, 9-2
- function codes, (P) *I/O User*, 9-24, A-8
- function modifiers, (P) *I/O User*, 9-27, 9-29, 9-42 to 9-47
- hardware interface, (P) *I/O User*, 9-3
- I/O functions, (P) *I/O User*, 9-25, 9-27, 9-30, 9-47
- I/O status block, (P) *I/O User*, 9-53
- IEEE 802 packet format
 - Class I service packet format, (P) *I/O User*, 9-18, 9-34
 - driver service parameter, (P) *I/O User*, 9-40
 - extended packet format, (P) *I/O User*, 9-21, 9-34
 - 802 format SAP parameter, (P) *I/O User*, 9-39
 - group SAP parameter, (P) *I/O User*, 9-35
 - read function, (P) *I/O User*, 9-25
 - SAP use and restrictions, (P) *I/O User*, 9-20
 - support for, (P) *I/O User*, 9-8
 - user-supplied service packet format, (P) *I/O User*, 9-20, 9-34
 - write function, (P) *I/O User*, 9-27
- IEEE 802 programming example, (P) *I/O User*, 9-55
- in PI protocol, (S) *VMScluster Sys*, F-3
- internal loopback mode (DELUA only), (P) *I/O User*, 9-35
- loopback mode, (P) *I/O User*, 9-32
- message size, (P) *I/O User*, 9-23, 9-26, 9-27, 9-29, 9-32
- modify characteristics, (P) *I/O User*, 9-30
- multicast address state, (P) *I/O User*, 9-36
- packet format, (P) *I/O User*, 9-15
 - Class I service, (P) *I/O User*, 9-18
 - Ethernet, (P) *I/O User*, 9-16
 - extended 802, (P) *I/O User*, 9-21
 - IEEE 802, (P) *I/O User*, 9-18
 - set mode parameters, (P) *I/O User*, 9-40
 - SNAP SAP value, (P) *I/O User*, 9-21
 - user-supplied service, (P) *I/O User*, 9-20
- padding
 - message size, (P) *I/O User*, 9-23, 9-27
 - transmit messages, (P) *I/O User*, 9-36
- parameter ID, (P) *I/O User*, 9-30
 - packet format, (P) *I/O User*, 9-40
- parameter validation, (P) *I/O User*, 9-41

LAN drivers (cont'd)

- port, (S) *Sys Mgr Tuning*, 22-2; (P) *I/O User*, 9-2
 - address, (P) *I/O User*, 9-31
 - start, (P) *I/O User*, 9-30
- privilege, (P) *I/O User*, 9-25
- programming example, (P) *I/O User*, 9-55
- programming notes, (P) *I/O User*, 9-54
- promiscuous mode, (P) *I/O User*, 9-37, 9-54
 - rules for, (P) *I/O User*, 9-54
- protocol type, (S) *Sys Mgr Tuning*, 22-2; (P) *I/O User*, 9-2, 9-25, 9-28, 9-38
 - access mode, (P) *I/O User*, 9-31
 - cross-company, (P) *I/O User*, 9-16
 - Digital, (P) *I/O User*, 9-16
 - Ethernet, (P) *I/O User*, 9-16
- protocol type on Alpha systems
 - sharing, (P) *I/O User*, 9-21
- protocol type on VAX systems
 - sharing, (P) *I/O User*, 9-17
- protocol type sharing on Alpha systems, (P) *I/O User*, 9-21
- protocol type sharing on VAX systems, (P) *I/O User*, 9-17
- read function, (P) *I/O User*, 9-25
- restart, (P) *I/O User*, 9-38
- sense mode function, (P) *I/O User*, 9-47
- Service Access Point (SAP), (P) *I/O User*, 9-20
- set controller mode
 - extended characteristics, (P) *I/O User*, 9-31 to 9-40
 - P2 buffer, (P) *I/O User*, 9-30
 - parameter ID, (P) *I/O User*, 9-30
- set controller mode on Alpha systems
 - protocol type sharing, (P) *I/O User*, 9-21
- set controller mode on VAX systems
 - protocol type sharing, (P) *I/O User*, 9-17
- set mode function, (P) *I/O User*, 9-30
- shared default mode on Alpha systems, (P) *I/O User*, 9-21
- shared default mode on VAX systems, (P) *I/O User*, 9-17
- shared with destination mode on Alpha systems, (P) *I/O User*, 9-21
- shared with destination mode on VAX systems, (P) *I/O User*, 9-17
- shutdown controller mode, (P) *I/O User*, 9-42
- shutdown port, (P) *I/O User*, 9-42
- software interface, (P) *I/O User*, 9-3
- status returns, (P) *I/O User*, A-8
- supported devices, (P) *I/O User*, 9-2
- SYS\$ASSIGN routine, (P) *I/O User*, 9-4
- SYS\$DASSGN routine, (P) *I/O User*, 9-4
- SYS\$GETDVI routine, (P) *I/O User*, 9-22
- Token Ring, (S) *Sys Mgr Tuning*, 22-2; (P) *I/O User*, 9-2
- transmit/receive buffer size, (P) *I/O User*, 9-31
- unit and line status, (P) *I/O User*, 9-23

LAN drivers (cont'd)

- write function, (P) *I/O User*, 9-27

Language

- selecting for SHOW command, (G) *V6.2 New Feat*, 3-19

Language expressions

- compared to address expressions, (P) *Debugger*, 8-7

- DEPOSIT command, (P) *Debugger*, 8-3

- EVALUATE command, (P) *Debugger*, 8-5

- evaluating, (P) *Debugger*, 8-5

- FOR command, (P) *Debugger*, 12-10

- IF command, (P) *Debugger*, 12-10

- REPEAT command, (P) *Debugger*, 12-10

- WHEN clause, (P) *Debugger*, 7-9

- WHILE command, (P) *Debugger*, 12-10

Language extensions, (P) *Calling Std*, 2-5

Language formats, (S) *Sys Mgr Essentials*, 5-42

Language independence

- testing for, (P) *Modular Proc*, 4-1, 4-4

Languages

- ANSI/ISO, (G) *SW Overview*, 2-4, A-2

- compilers, (G) *SW Overview*, 4-5

- current, (P) *Debugger*, 8-10

- multilanguage program, (P) *Debugger*, 13-7

- setting, (P) *Debugger*, 8-10

- specifying, (S) *Sys Mgr Essentials*, 5-43, 5-44, 5-48

- support by debugger, (P) *Debugger*, 1-2, 6-2

- user's choice of natural, (P) *LIB\$, LIB-248*

Language-Sensitive Editor/Source Code Analyzer

- See LSE/SCA

Language-support procedure, (P) *Calling Std*, 1-5

LAN Manager, (G) *SW Overview*, 6-18

LAN protocol analysis program

- distributed combination trigger, (S) *VMScluster Sys*, F-27

- distributed enable, (S) *VMScluster Sys*, F-27

- multiple user-defined patterns, (S) *VMScluster Sys*, F-27

- packet transmission, (S) *VMScluster Sys*, F-27

- required features, (S) *VMScluster Sys*, F-26

- retransmission, (S) *VMScluster Sys*, F-20

- troubleshooting NISCA, (S) *VMScluster Sys*, F-26

LANs (local area networks), (S) *TCP/IP*, 1-3;

- (S) *DECnet Intro*, 1-5, 1-7, 3-4; (S) *DECnet Mgmt*, 1-3

- See also Ethernet and FDDI

- adjacent node, (S) *DECnet Mgmt*, 2-7

- alternate adapter booting, (S) *VMScluster Sys*, 9-6

- analyzing retransmission errors, (S) *VMScluster Sys*, F-36

- bridge, (S) *DECnet Intro*, 1-7

- bridge failover, (S) *VMScluster Sys*, 3-20

- broadcast routing timer, (S) *DECnet Mgmt*, 3-55

LANs (local area networks) (cont'd)

- capturing packets, (S) *VMScluster Sys*, F-33

- capturing retransmissions, (S) *VMScluster Sys*, F-33

- capturing retransmitted packets, (S)

- VMScluster Sys*, F-36

- changing to a mixed-interconnect, (S)

- VMScluster Sys*, 8-23

- channel, (S) *DECnet Intro*, 1-7

- circuit, (S) *DECnet Mgmt*, 1-3, 2-6, 2-7, 3-26

- circuit identification, (S) *DECnet Mgmt*, 3-26

- circuit parameters, (S) *DECnet Mgmt*, 3-33

- clearing counters, (G) *V6.2 New Feat*, 6-22;

- (S) *Sys Mgr Tuning*, 22-25; (S) *Sys Mgmt Util A-L*, 12-9

- communication devices and drivers, (G) *V6.2 New Feat*, 4-2

- configurations, (S) *VMScluster Sys*, 3-5, 3-15,

- 3-18, 3-19; (S) *DECnet Intro*, 1-7, 1-8;

- (S) *DECnet Mgmt*, 1-3

- configuring adapter, (S) *VMScluster Sys*, 4-8, 9-5

- connections, (S) *Sys Mgr Tuning*, 21-8

- controlling with sample programs, (S)

- VMScluster Sys*, D-1

- creating a network component list, (S)

- VMScluster Sys*, E-7

- creating a network component representation, (S) *VMScluster Sys*, E-5

- data capture on, (S) *VMScluster Sys*, F-28

- data link for VMScluster, (S) *DECnet Mgmt*, 1-10

- debugging satellite booting, (S) *VMScluster Sys*, C-6

- deleting device information, (G) *V6.2 New Feat*,

- 6-17; (S) *Sys Mgr Tuning*, 22-17; (S) *Sys Mgmt Util A-L*, 12-8, 12-20

- deleting node information, (G) *V6.2 New Feat*,

- 6-21; (S) *Sys Mgr Tuning*, 22-20; (S) *Sys Mgmt Util A-L*, 12-9, 12-20

- designated router, (S) *DECnet Mgmt*, 1-7, 2-15, 2-19, 3-33

- device-attention entry, (S) *VMScluster Sys*, C-30

- device management, (G) *V6.2 New Feat*, 6-4; (S) *Sys Mgr Tuning*, 22-9

- device names, (G) *V6.2 New Feat*, 4-2

- disabling MOP downline load service, (G) *V6.2 New Feat*, 6-17; (S) *Sys Mgr Tuning*, 22-23

- displaying device information, (G) *V6.2 New Feat*, 6-16; (S) *Sys Mgr Tuning*, 22-15

- displaying LAN device configurations, (G) *V6.2 New Feat*, 6-12; (S) *Sys Mgr Tuning*, 22-9

- displaying LAN device parameters, (G) *V6.2 New Feat*, 6-9; (S) *Sys Mgr Tuning*, 22-10; (S) *Sys Mgmt Util A-L*, 12-17, 12-32

LANs (local area networks) (cont'd)

- displaying node information, (G) *V6.2 New Feat*, 6-20; (S) *Sys Mgr Tuning*, 22-18; (S) *Sys Mgmt Util A-L*, 12-18, 12-37
- displaying OPCOM messages, (G) *V6.2 New Feat*, 6-23; (S) *Sys Mgr Tuning*, 22-25; (S) *Sys Mgmt Util A-L*, 12-21
- displaying status and counters, (G) *V6.2 New Feat*, 6-21, 6-22; (S) *Sys Mgr Tuning*, 22-23, 22-24; (S) *Sys Mgmt Util A-L*, 12-18, 12-37
- distributed enable messages, (S) *VMScluster Sys*, F-35
- distributed trigger messages, (S) *VMScluster Sys*, F-35
- downline loading, (S) *VMScluster Sys*, 9-9
- downline system load, (S) *DECnet Mgmt*, 4-5
- dump assistance multicast address, (S) *DECnet Mgmt*, 4-13
- enabling data capture, (S) *VMScluster Sys*, F-34
- enabling MOP downline load service, (G) *V6.2 New Feat*, 6-17; (S) *Sys Mgr Tuning*, 22-23
- end node, (S) *DECnet Mgmt*, 1-7, 2-19, 3-33
- end node caching, (S) *DECnet Mgmt*, 2-20
- error-log entry, (S) *VMScluster Sys*, C-33
- Ethernet, (G) *SW Overview*, 1-11, 6-18
- Ethernet adapter, (G) *SW Overview*, 1-6
- Ethernet controllers, (G) *V6.2 New Feat*, 4-2
- Ethernet troubleshooting, (S) *VMScluster Sys*, F-30
- extended, (G) *SW Overview*, 1-11
- FDDI, (G) *SW Overview*, 1-11
- FDDI adapter, (G) *SW Overview*, 1-6
- hardware address, (S) *VMScluster Sys*, 8-5; (S) *DECnet Mgmt*, 7-9
- ISA devices, (G) *V6.2 New Feat*, 4-3 to 4-5
- LANACP device database management, (G) *V6.2 New Feat*, 6-13; (S) *Sys Mgr Tuning*, 22-14
- LANACP related OPCOM messages, (G) *V6.2 New Feat*, 6-29; (S) *Sys Mgr Tuning*, 22-22
- LAN address for satellite, (S) *VMScluster Sys*, 9-8
- LAN Auxiliary Control Program (LANACP) utility, (G) *V6.2 New Feat*, 6-26; (S) *Sys Mgr Tuning*, 22-5
- LAN bridge failover, (S) *VMScluster Sys*, 3-20
- LAN Control Program (LANCP) utility, (G) *V6.2 New Feat*, 6-2; (S) *Sys Mgr Tuning*, 22-6
- LAN control subroutines, (S) *VMScluster Sys*, E-1
- LANCP command files, (G) *V6.2 New Feat*, 6-26; (S) *Sys Mgr Tuning*, 22-9

LANs (local area networks) (cont'd)

- LANCP SPAWN command, (S) *Sys Mgmt Util A-L*, 12-39
- LANCP SPAWN function, (G) *V6.2 New Feat*, 6-26; (S) *Sys Mgr Tuning*, 22-9
- LAN firmware updates, (G) *V6.2 New Feat*, 6-13; (S) *Sys Mgr Tuning*, 22-14
- LAN MOP and DECnet MOP, (G) *V6.2 New Feat*, 6-28; (S) *Sys Mgr Tuning*, 22-20
- large-packet support for FDDI, (S) *VMScluster Sys*, 10-17
- limiting end nodes, (S) *DECnet Mgmt*, 3-51
- limiting routers, (S) *DECnet Mgmt*, 3-50
- line, (S) *DECnet Mgmt*, 2-11
- line device, (S) *DECnet Mgmt*, 2-14
- Load Trace facility, (G) *V6.2 New Feat*, 6-23; (S) *Sys Mgr Tuning*, 22-25
- loopback tests, (S) *DECnet Mgmt*, 7-9
- LRPSIZE system parameter, (S) *VMScluster Sys*, 10-17
- maximum packet size, (S) *VMScluster Sys*, 10-17
- migrating DECnet MOP to LAN MOP, (G) *V6.2 New Feat*, 6-28; (S) *Sys Mgr Tuning*, 22-20
- monitoring LAN activity, (S) *VMScluster Sys*, 10-25
- MOP console carrier, (G) *V6.2 New Feat*, 6-24; (S) *Sys Mgr Tuning*, 22-26; (S) *Sys Mgmt Util A-L*, 12-10
- MOP downline load service, (G) *V6.2 New Feat*, 6-27; (S) *Sys Mgr Tuning*, 22-20
- MOP downline load service management, (G) *V6.2 New Feat*, 6-21; (S) *Sys Mgr Tuning*, 22-23
- MOP trigger boot, (G) *V6.2 New Feat*, 6-25; (S) *Sys Mgr Tuning*, 22-27; (S) *Sys Mgmt Util A-L*, 12-40
- multiadapter configuration requirements, (S) *VMScluster Sys*, 3-16
- multicast address definition, (S) *DECnet Mgmt*, 2-3
- multiple adapters, (S) *VMScluster Sys*, 3-15
- multiple-site VMScluster systems, (G) *V6.2 New Feat*, 8-3
- network failure analysis, (S) *VMScluster Sys*, C-16, D-3
- NISCA protocol, (S) *VMScluster Sys*, F-20
- NISCA troubleshooting, (S) *VMScluster Sys*, F-1
- NISCS_CONV_BOOT system parameter, (S) *VMScluster Sys*, C-6
- node database management, (G) *V6.2 New Feat*, 6-18; (S) *Sys Mgr Tuning*, 22-17
- OPCOM messages, (S) *VMScluster Sys*, D-11
- physical address, (S) *DECnet Mgmt*, 4-5, 7-9
- port, (S) *VMScluster Sys*, C-19

LANs (local area networks) (cont'd)

- required tools for troubleshooting, (S)
VMScluster Sys, F-26
 - router, (S) *DECnet Mgmt*, 1-7, 2-19, 3-33
 - running the LANACP utility, (G) *V6.2 New Feat*, 6-27; (S) *Sys Mgr Tuning*, 22-6
 - sample LAN MOP set up, (G) *V6.2 New Feat*, 6-29; (S) *Sys Mgr Tuning*, 22-22
 - sample programs, (S) *VMScluster Sys*, D-2, D-3
 - satellite booting, (S) *VMScluster Sys*, 9-5, 9-6, 9-8
 - setting device information, (G) *V6.2 New Feat*, 6-14; (S) *Sys Mgr Tuning*, 22-15; (S) *Sys Mgmt Util A-L*, 12-11
 - setting LAN device parameters, (G) *V6.2 New Feat*, 6-5; (S) *Sys Mgr Tuning*, 22-12
 - setting node information, (G) *V6.2 New Feat*, 6-18; (S) *Sys Mgr Tuning*, 22-18
 - setting up LAN MOP with CLUSTER_CONFIG, (G) *V6.2 New Feat*, 6-29; (S) *Sys Mgr Tuning*, 22-21
 - single-adaptor booting, (S) *VMScluster Sys*, 9-5
 - starting and stopping the NISCA protocol, (S) *VMScluster Sys*, D-1
 - starting network failure analysis, (S) *VMScluster Sys*, E-10
 - starting NISCA protocol, (S) *VMScluster Sys*, D-1
 - on LAN adapters, (S) *VMScluster Sys*, E-2
 - stopping network failure analysis, (S) *VMScluster Sys*, E-10
 - stopping NISCA protocol, (S) *VMScluster Sys*, D-2
 - on LAN adapters, (S) *VMScluster Sys*, C-39, E-3
 - stopping on all LAN adapters, (S) *VMScluster Sys*, E-3
 - stopping the LANACP utility, (G) *V6.2 New Feat*, 6-27; (S) *Sys Mgr Tuning*, 22-6
 - subroutine package, (S) *VMScluster Sys*, E-1, E-3, E-5, E-7, E-10
 - system management enhancements, (G) *V6.2 New Feat*, 6-1; (S) *Sys Mgr Tuning*, 22-1
 - token ring, (G) *SW Overview*, 1-11, 6-18
 - token ring LAN adapter, (G) *SW Overview*, 1-6
 - troubleshooting NISCA communications, (S) *VMScluster Sys*, F-16
 - upline memory dump, (S) *DECnet Mgmt*, 4-13
- ## LAN segments
- bridge failover, (S) *Dependable*, 7-9
 - in VMScluster configurations, (S) *Dependable*, 7-6 to 7-7
 - three in VMScluster configuration, (S) *VMScluster Sys*, 3-19
 - two in VMScluster configuration, (S) *VMScluster Sys*, 3-18

LAN segments (cont'd)

- using multiple, (S) *VMScluster Sys*, 3-17
- ## LAN Traffic Monitor
- See LTM
- ## Large immediate value
- Alpha, (P) *Calling Std*, 3-51
- ## LAST (local area systems transport) protocols, (G)
- SW Overview*, 6-8
- ## Last-chance exception vectors, (P) Concepts,
- 13-25
- ## Last-chance handler, (P) Debugger, 13-13
- ## Last login messages, (S) Security, 3-17
- disabling, (S) *Security*, 7-24
- ## LASTport and LASTport/DISK protocols
- not in C2 evaluation, (S) *Security*, C-3
- ## LASTport Control Program (LASTCP), (S) Sys
- Mgr Tuning*, 23-5 to 23-13
 - command summary, (S) *Sys Mgr Tuning*, 23-10
- ## LASTport/Disk protocol, (S) Sys Mgr Tuning,
- 23-5
- ## LASTport/Disk service, (S) Sys Mgr Tuning,
- 23-12
 - ESS\$DADDRIVER, (S) *Sys Mgr Tuning*, 23-13
- ## LASTport network transport control program
- supported on Alpha systems, (S) *Comparison*, 2-5
- ## LASTport protocol, (S) Sys Mgr Tuning, 23-5
- ## LASTport/Tape protocol, (S) Sys Mgr Tuning,
- 23-5
- ## LASTport/Tape service, (S) Sys Mgr Tuning,
- 23-12
 - ESS\$MADDRIVER, (S) *Sys Mgr Tuning*, 23-13
- ## LAT\$CONFIG.COM command procedure, (S) Sys
- Mgr Tuning*, 24-10
 - invoking during system startup, (S) *Sys Mgr Essentials*, 5-15
- ## LAT \$QIO, (P) I/O User, 5-76
- ## LAT\$STARTUP.COM command procedure, (S)
- Sys Mgr Tuning*, 24-10, 24-11; (S) *Sys Mgmt Util A-L*, 13-34
 - invoking during system startup, (S) *Sys Mgr Essentials*, 5-15
- ## LAT\$SYSTARTUP.COM command procedure, (S)
- Sys Mgr Tuning*, 24-10, 24-11, 24-12, 24-17
 - example, (S) *Sys Mgr Tuning*, 24-17
 - invoking during system startup, (S) *Sys Mgr Essentials*, 5-15
- ## LAT Ancillary Control Process (LATACP), (S) Sys
- Mgr Tuning*, 24-19
- ## LAT Control Program (LATCP) utility, (G) V6.2
- New Feat*, 3-18; (G) *SW Overview*, 3-9, 3-13; (S) *Sys Mgr Tuning*, 24-3, 24-8; (S) *Comparison*, 2-4
- ## See also LAT software
- ## DELETE QUEUE_ENTRY command, (S) Sys
- Mgr Tuning*, 24-16

LAT Control Program (LATCP) utility (cont'd)

- exiting, (S) *Sys Mgr Tuning*, 24-9; (S) *Sys Mgmt Util A-L*, 13-22
 - features, (S) *Sys Mgr Tuning*, 24-9
 - help, (S) *Sys Mgmt Util A-L*, 13-22
 - invoking, (S) *Sys Mgr Tuning*, 24-9; (S) *Sys Mgmt Util A-L*, 13-4
 - queuing incoming requests, (S) *Sys Mgr Tuning*, 24-15
 - SET NODE command, (S) *Sys Mgr Tuning*, 24-16
 - SET SERVICE command, (S) *Sys Mgr Tuning*, 24-16
 - setting SCSSYSTEMID system parameter, (S) *Sys Mgmt Util A-L*, 13-7
 - setting up limited services, (S) *Sys Mgr Tuning*, 24-15
 - SHOW QUEUE_ENTRY command, (S) *Sys Mgr Tuning*, 24-16
 - SHOW SERVICE command, (S) *Sys Mgr Tuning*, 24-16
 - summary of commands, (S) *Sys Mgr Tuning*, 24-9
- ## LAT protocol
- not in C2 evaluation, (S) *Security*, C-3
- ## LATs (local area transports)
- ACMS terminal failover, (S) *Dependable*, 8-52, 8-55
 - protocol, (S) *DECnet Intro*, 1-7
- ## LAT SENSEMODE \$QIO Function, (P) I/O User, 5-59
- ## LAT server, (S) Sys Mgr Tuning, 23-6
- ## LAT SETMODE \$QIO Function, (P) I/O User, 5-51
- ## LAT software, (G) SW Overview, 1-6, 3-13
- See also LAT Control Program (LATCP) utility
 - advantages and uses, (S) *Sys Mgr Tuning*, 24-2
 - application programs, (S) *Sys Mgr Tuning*, 24-2
 - changing DECserver characteristics, (S) *Sys Mgmt Util A-L*, 13-10, 13-35
 - characteristics
 - added or changed, (S) *Sys Mgmt Util A-L*, 13-4
 - storing, (S) *Sys Mgmt Util A-L*, 13-4
 - connections, (S) *Sys Mgmt Util A-L*, 13-32, 13-57
 - incoming, (S) *Sys Mgmt Util A-L*, 13-27
 - outgoing, (S) *Sys Mgmt Util A-L*, 13-27
 - specifying type of, (S) *Sys Mgmt Util A-L*, 13-27
 - creating a service, (S) *Sys Mgr Tuning*, 24-13
 - customizing, (S) *Sys Mgr Tuning*, 24-12
 - devices
 - changing HANGUP characteristic, (S) *Sys Mgmt Util A-L*, 13-10

LAT software (cont'd)

- device unit number, (S) *Sys Mgmt Util A-L*, 13-33
 - enabling outgoing connections, (S) *Sys Mgr Tuning*, 24-16
 - LAT Control Program (LATCP) utility, (G) V6.2 *New Feat*, 3-18
 - load balancing, (S) *Sys Mgr Tuning*, 24-3
 - managing the database size, (S) *Sys Mgr Tuning*, 24-19
 - modems, (S) *Sys Mgr Tuning*, 24-2
 - outgoing connections, (S) *Sys Mgr Tuning*, 24-2, 24-3, 24-8
 - printers, (S) *Sys Mgr Tuning*, 24-2
 - autostart queues on, (S) *Sys Mgr Essentials*, 13-4, 13-10
 - increasing availability of, (S) *Sys Mgr Essentials*, 13-4, 13-10
 - LATSYM symbiont, (S) *Sys Mgr Essentials*, 13-3, 13-78
 - PRTSMB symbiont, (S) *Sys Mgr Essentials*, 13-78
 - sample configuration, (S) *Sys Mgr Essentials*, 13-10
 - setting up, (S) *Sys Mgr Essentials*, 13-14
 - spooling, (S) *Sys Mgr Essentials*, 7-14
 - troubleshooting, (S) *Sys Mgr Essentials*, 13-78
 - queuing incoming requests, (S) *Sys Mgr Tuning*, 24-15
- ## service
- announcements, (S) *Sys Mgr Tuning*, 24-4, 24-8
 - creating, (S) *Sys Mgmt Util A-L*, 13-14
 - database, (S) *Sys Mgr Tuning*, 24-8; (S) *Sys Mgmt Util A-L*, 13-30, 13-33
 - dedicated applications, (S) *Sys Mgr Tuning*, 24-2
 - defined, (S) *Sys Mgr Tuning*, 24-2
 - deleting, (S) *Sys Mgmt Util A-L*, 13-21
 - displaying characteristics of, (S) *Sys Mgmt Util A-L*, 13-58
 - displaying counters, (S) *Sys Mgmt Util A-L*, 13-57
 - displaying information, (S) *Sys Mgmt Util A-L*, 13-57
 - identifier, (S) *Sys Mgmt Util A-L*, 13-14, 13-30, 13-39
 - limiting size of node database, (S) *Sys Mgmt Util A-L*, 13-30, 13-33
 - modifying characteristics of, (S) *Sys Mgmt Util A-L*, 13-39
 - naming, (S) *Sys Mgmt Util A-L*, 13-14, 13-26
 - node, (S) *Sys Mgr Tuning*, 24-3, 24-4, 24-9
 - rating, (S) *Sys Mgmt Util A-L*, 13-15, 13-40, 13-51, 13-58

- LAT software
 - service (cont'd)
 - remote printing, (S) *Sys Mgr Tuning*, 24-2
 - session limit, (S) *Sys Mgmt Util A-L*, 13-29, 13-31
 - SET HOST/LAT command, (G) *V6.2 New Feat*, 3-18
 - setting up limited services, (S) *Sys Mgr Tuning*, 24-15
 - setting up ports, (S) *Sys Mgr Tuning*, 24-14
 - starting network in command procedure, (S) *Sys Mgr Essentials*, 5-15; (S) *Sys Mgr Tuning*, 24-11
 - starting with LAT\$STARTUP.COM, (S) *Sys Mgr Essentials*, 5-15; (S) *Sys Mgr Tuning*, 24-10, 24-11
 - starting with SET NODE/STATE=ON, (S) *Sys Mgmt Util A-L*, 13-32
 - stopping with SET NODE/STATE=OFF, (S) *Sys Mgmt Util A-L*, 13-32
 - terminals, (S) *Sys Mgr Essentials*, 7-12; (S) *Sys Mgr Tuning*, 24-2
 - determining characteristics of, (S) *Sys Mgr Essentials*, 7-12
 - disconnecting, (S) *Sys Mgr Essentials*, 7-11
- LAT startup, (S) *Comparison*, 2-4
- LATSYM symbiont, (S) *Sys Mgr Essentials*, 13-3, 13-78; (S) *Comparison*, 2-4
- LAT terminals
 - debugging using two, (P) *Debugger*, 13-6
- LAVC\$FAILURE_ANALYSIS.MAR program, (S) *Dependable*, 7-9 to 7-11
- distributed enable filter, (S) *VMScluster Sys*, F-34
- distributed enable messages, (S) *VMScluster Sys*, F-35
- distributed trigger filter, (S) *VMScluster Sys*, F-34
- distributed trigger messages, (S) *VMScluster Sys*, F-35
- filtering LAN packets, (S) *VMScluster Sys*, F-33
- filtering LAN retransmissions, (S) *VMScluster Sys*, F-33
- filters, (S) *VMScluster Sys*, F-33
- partner program, (S) *VMScluster Sys*, F-37
- retransmission errors, (S) *VMScluster Sys*, F-36
- sample program, (S) *VMScluster Sys*, D-3
- scribe program, (S) *VMScluster Sys*, F-38
- starter program, (S) *VMScluster Sys*, F-36
- LAVC\$START_BUS.MAR sample program, (S) *VMScluster Sys*, D-1
- LAVC\$STOP_BUS.MAR sample program, (S) *VMScluster Sys*, D-2
- %LAVC-I-ASUSPECT OPCOM message, (S) *VMScluster Sys*, D-11
- %LAVC-S-WORKING OPCOM message, (S) *VMScluster Sys*, D-11
- %LAVC-W-PSUSPECT OPCOM message, (S) *VMScluster Sys*, D-11
- LAVc_all filter
 - HP 4972 LAN Protocol Analyzer, (S) *VMScluster Sys*, F-33
- LAVc_TR_ReXMT filter
 - HP 4972 LAN Protocol Analyzer, (S) *VMScluster Sys*, F-33
- Layered products
 - inclusion on distribution kit, (G) *V6.2 New Feat*, 3-23
 - startup database, (S) *Sys Mgr Essentials*, 5-18, 5-19
 - startup phases, (S) *Sys Mgr Essentials*, 5-18
- Layered software installation, (S) *Sys Mgr Essentials*, 3-18
- Layers in networking architecture, (S) *TCP/IP*, 2-1
- LBR\$CLOSE routine, (P) *Util Routines*, LBR-7, LBR-8, LBR-28
- LBR\$DELETE_DATA routine, (P) *Util Routines*, LBR-16, LBR-29
- LBR\$DELETE_KEY routine, (P) *Util Routines*, LBR-16, LBR-31
- LBR\$FIND routine, (P) *Util Routines*, LBR-33
- LBR\$FLUSH routine, (P) *Util Routines*, LBR-35
- LBR\$GET_HEADER routine, (P) *Util Routines*, LBR-23, LBR-37
- LBR\$GET_HELP routine, (P) *Util Routines*, LBR-39
- LBR\$GET_HISTORY routine, (P) *Util Routines*, LBR-42
- LBR\$GET_INDEX routine, (P) *Util Routines*, LBR-26, LBR-44
- LBR\$GET_RECORD routine, (P) *Util Routines*, LBR-14, LBR-46
- LBR\$INI_CONTROL routine, (P) *Util Routines*, LBR-8, LBR-48
- LBR\$INSERT_KEY routine, (P) *Util Routines*, LBR-10, LBR-50
- LBR\$LOOKUP_KEY routine, (P) *Util Routines*, LBR-10, LBR-14, LBR-16, LBR-22, LBR-52
- LBR\$OPEN routine, (P) *Util Routines*, LBR-7, LBR-8, LBR-54
- LBR\$OUTPUT_HELP routine, (P) *Util Routines*, LBR-25, LBR-58
- LBR\$PUT_END routine, (P) *Util Routines*, LBR-10, LBR-62
- LBR\$PUT_HISTORY routine, (P) *Util Routines*, LBR-63
- LBR\$PUT_RECORD routine, (P) *Util Routines*, LBR-10, LBR-65

LBR\$REPLACE_KEY routine, (P) *Util Routines*, LBR-10, LBR-67

LBR\$RET_RMSSTV routine, (P) *Util Routines*, LBR-69

LBR\$SEARCH routine, (P) *Util Routines*, LBR-70

LBR\$SET_INDEX routine, (P) *Util Routines*, LBR-72

LBR\$SET_LOCATE routine, (P) *Util Routines*, LBR-74

LBR\$SET_MODULE routine, (P) *Util Routines*, LBR-22, LBR-75

LBR\$SET_MOVE routine, (P) *Util Routines*, LBR-77

LBR\$_KEYNOTFND routine, (P) *Util Routines*, LBR-10

LBR routines, (P) *Util Routines*, LBR-1 to LBR-18

control index, (P) *Util Routines*, LBR-6

data records

- reading, (P) *Util Routines*, LBR-46
- writing, (P) *Util Routines*, LBR-65

end-of-module record, writing, (P) *Util Routines*, LBR-62

examples, (P) *Util Routines*, LBR-6 to LBR-18

- creating a new library, (P) *Util Routines*, LBR-8
- deleting a module from a library, (P) *Util Routines*, LBR-16 to LBR-18
- inserting a module into a library, (P) *Util Routines*, LBR-10 to LBR-13

header, (P) *Util Routines*, LBR-2

help text

- outputting, (P) *Util Routines*, LBR-58
- retrieving, (P) *Util Routines*, LBR-39

index, (P) *Util Routines*, LBR-2

index searching, (P) *Util Routines*, LBR-70

library

- closing, (P) *Util Routines*, LBR-28
- creating, (P) *Util Routines*, LBR-54
- opening, (P) *Util Routines*, LBR-54
- structure, (P) *Util Routines*, LBR-2 to LBR-5
- types, (P) *Util Routines*, LBR-1

library file, flushing, (P) *Util Routines*, LBR-35

library header information, (P) *Util Routines*, LBR-37

library index

- getting contents, (P) *Util Routines*, LBR-44
- initializing, (P) *Util Routines*, LBR-48
- searching for key, (P) *Util Routines*, LBR-44

library key, (P) *Util Routines*, LBR-2

- creating ASCII or binary, (P) *Util Routines*, LBR-55
- deleting, (P) *Util Routines*, LBR-31
- finding, (P) *Util Routines*, LBR-33
- inserting, (P) *Util Routines*, LBR-50

LBR routines

library key (cont'd)

- looking up, (P) *Util Routines*, LBR-52
- replacing, (P) *Util Routines*, LBR-67

library update history record, retrieving, (P) *Util Routines*, LBR-42

locate mode, setting record access mode to, (P) *Util Routines*, LBR-74

module, (P) *Util Routines*, LBR-2

- accessing with RFA, (P) *Util Routines*, LBR-33
- deleting data records, (P) *Util Routines*, LBR-29
- deleting header, (P) *Util Routines*, LBR-29

module headers, (P) *Util Routines*, LBR-75

move mode, setting record access to, (P) *Util Routines*, LBR-77

RMS status value, returning, (P) *Util Routines*, LBR-69

setting current index number, (P) *Util Routines*, LBR-72

summary, (P) *Util Routines*, LBR-6

update history records, writing, (P) *Util Routines*, LBR-63

virtual memory, recovering, (P) *Util Routines*, LBR-35

LC_COLLATE locale category, (G) *V6.2 New Feat*, 5-23

LC_CTYPE locale category, (G) *V6.2 New Feat*, 5-27

LC_MESSAGES locale category, (G) *V6.2 New Feat*, 5-30

LC_MONETARY locale category, (G) *V6.2 New Feat*, 5-31

- format variations, (G) *V6.2 New Feat*, 5-34
- keywords, (G) *V6.2 New Feat*, 5-31

LC_NUMERIC locale category, (G) *V6.2 New Feat*, 5-35

LC_TIME locale category, (G) *V6.2 New Feat*, 5-36

- field descriptors, (G) *V6.2 New Feat*, 5-39
- keywords, (G) *V6.2 New Feat*, 5-37
- sample locale definition, (G) *V6.2 New Feat*, 5-41

ldexp routine, (P) *Portable Math*, DPML-40, B-9

LEF (local event flag) state, (S) *DECnet Mgmt*, 8-18

LENGTH attribute, (P) *Rec Mgmt Util*, 4-27, 4-28

Length field

- using to indicate constant (keyword) value, (P) *RMS Ref*, 2-3
- using to indicate mask or bit offset, (P) *RMS Ref*, 2-3

Length of key segment, (P) *Rec Mgmt Util*, 4-29

- LES\$ACP (LES ancillary control process), (S) *DECnet Mgmt*, 1-13
- LEVEL1_INDEX_AREA attribute, (P) *Rec Mgmt Util*, 4-26, 4-27; (P) *File Appl*, 3-25
- LEVEL1_RECORD_COUNT attribute, (P) *Rec Mgmt Util*, 4-5
- Level of prompting, (P) *Rec Mgmt Util*, 6-9
- Levels of abstraction, (P) *Modular Proc*, 2-2
- Levels of dependability, (S) *Dependable*, 1-1, 2-4
- Lexical functions, (G) *DCL A-M*, DCLI-285; (G) *SW Overview*, 5-4; (G) *Compatibility*, A-2 and remote files, (S) *DECnet Intro*, 2-12, 2-13
- changing process characteristics with, (G) *User*, 17-3
- converting data types, (G) *User*, 17-17
- definition, (G) *User*, 17-1
- evaluating data, (G) *User*, 17-17
- examining character strings, (G) *User*, 17-13
- extracting parts of character strings, (G) *User*, 17-13, 17-14
- F\$DIRECTORY, (G) *User*, 14-23
- F\$GETJPI, (S) *Sys Mgr Tuning*, 26-9
- F\$GETQUI, (S) *Sys Mgr Essentials*, 13-51
- F\$GETSYI, (S) *Sys Mgr Tuning*, 26-9
- formatting output strings, (G) *User*, 17-15
- getting information about queues, (S) *Sys Mgr Essentials*, 13-51
- getting information about vector processing, (S) *Sys Mgr Tuning*, 26-9
- identifying symbols, (G) *User*, 17-18
- manipulating character strings with, (G) *User*, 17-12
- manipulating data types with, (G) *User*, 17-16
- obtaining information
- about files and devices, (G) *User*, 17-9
 - from VMScluster nodes, (G) *User*, 17-8, 17-9
 - process, (G) *User*, 17-2, 17-7
 - queues, (G) *User*, 17-7
 - system, (G) *User*, 17-6, 17-7
 - VMScluster system, (G) *User*, 17-6, 17-7
- overview, (G) *DCL A-M*, DCLI-283
- saving process characteristics, (G) *User*, 17-4
- searching for devices, (G) *User*, 17-10
- searching for files, (G) *User*, 17-10
- syntax, (G) *User*, 14-21
- translating logical names with, (G) *User*, 17-11
- usage, (G) *User*, 14-22
- using in command procedures, (G) *User*, 14-21
- LF character, (P) *Rec Mgmt Util*, 4-33
- lgamma routine, (P) *Portable Math*, DPML-41, B-9
- lgamma_max_float boundary value, (P) *Portable Math*, A-4
- LGI\$ICB_ACCTEXPIRED callback routine, (P) *Util Routines*, LGI-33
- LGI\$ICB_AUTOLOGIN callback routine, (P) *Util Routines*, LGI-34
- LGI\$ICB_CHECK_PASS callback routine, (P) *Util Routines*, LGI-35
- LGI\$ICB_DISUSER callback routine, (P) *Util Routines*, LGI-36
- LGI\$ICB_GET_INPUT callback routine, (P) *Util Routines*, LGI-37
- LGI\$ICB_GET_SYSPWD callback routine, (P) *Util Routines*, LGI-38
- LGI\$ICB_MODALHOURS callback routine, (P) *Util Routines*, LGI-39
- LGI\$ICB_PASSWORD callback routine, (P) *Util Routines*, LGI-40
- LGI\$ICB_PWDEXPIRED callback routine, (P) *Util Routines*, LGI-42
- LGI\$ICB_USERPARSE callback routine, (P) *Util Routines*, LGI-43
- LGI\$ICB_USERPROMPT callback routine, (P) *Util Routines*, LGI-44
- LGI\$ICB_VALIDATE callback routine, (P) *Util Routines*, LGI-45
- LGI\$ICR_AUTHENTICATE callout routine, (P) *Util Routines*, LGI-14
- LGI\$ICR_CHKRESTRICT callout routine, (P) *Util Routines*, LGI-17
- LGI\$ICR_DECWINIT callout routine, (P) *Util Routines*, LGI-19
- LGI\$ICR_FINISH callout routine, (P) *Util Routines*, LGI-21
- LGI\$ICR_IACT_START callout routine, (P) *Util Routines*, LGI-23
- LGI\$ICR_IDENTIFY callout routine, (P) *Util Routines*, LGI-25
- LGI\$ICR_INIT routine, (P) *Util Routines*, LGI-27
- LGI\$ICR_JOBSTEP callout routine, (P) *Util Routines*, LGI-29
- LGI\$ICR_LOGOUT callout routine, (P) *Util Routines*, LGI-31
- LGI callouts, (P) *Util Routines*, LGI-2
- /LGICMD qualifier and captive accounts, (S) *Security*, 7-8
- LGI system parameters, (S) *Security*, 7-30
- controlling login attempts, (S) *Security*, 7-29
 - LGI_CALLOUTS, (S) *Security*, C-10
- LGI_BRK_LIM system parameter, (G) *V6.2 New Feat*, 3-15
- LIB\$ADAWI routine, (P) *LIB\$*, LIB-3
- LIB\$ADDX routine, (P) *Concepts*, 5-7; (P) *LIB\$*, LIB-5
- LIB\$ADD_TIME routine, (P) *Concepts*, 5-7
- LIB\$ADD_TIMES routine, (P) *LIB\$*, LIB-8
- LIB\$ANALYZE_SDESC routine, (P) *LIB\$*, LIB-10; (P) *STR\$*, 2-4

LIB\$ASN_WTH_MBX routine, (S) *DECnet Mgmt*, 8-13, 8-25; (P) *Concepts*, 2-10; (P) *LIB\$*, LIB-12

LIB\$AST_IN_PROG routine, (P) *Concepts*, 6-22; (P) *LIB\$*, LIB-15

LIB\$ATTACH routine, (P) *Concepts*, 6-9; (P) *LIB\$*, LIB-17

LIB\$BBCCI routine, (P) *LIB\$*, LIB-19

LIB\$BBSSI routine, (P) *LIB\$*, LIB-21

LIB\$BUILD_NODESPEC routine, (P) *LIB\$*, LIB-23

LIB\$CALLG routine, (P) *Concepts*, 6-15; (P) *LIB\$*, LIB-26

LIB\$CHAR routine, (P) *LIB\$*, LIB-28

LIB\$COMPARE_NODENAME routine, (P) *LIB\$*, LIB-30

LIB\$COMPRESS_NODENAME routine, (P) *LIB\$*, LIB-32

LIB\$CONVERT_DATE_STRING routine, (P) *LIB\$*, LIB-35

LIB\$CRC routine, (P) *Concepts*, 6-16; (P) *LIB\$*, LIB-39

LIB\$CRC_TABLE routine, (P) *Concepts*, 6-16; (P) *LIB\$*, LIB-41

LIB\$CREATE_DIR routine, (P) *Concepts*, 6-22; (P) *LIB\$*, LIB-44

LIB\$CREATE_USER_VM_ZONE routine, (P) *Concepts*, 21-12, 21-16; (P) *LIB\$*, LIB-48

LIB\$CREATE_VM_ZONE routine, (P) *Concepts*, 21-7, 21-16; (P) *LIB\$*, LIB-51

LIB\$CRF_INS_KEY routine, (P) *LIB\$*, LIB-56

LIB\$CRF_INS_REF routine, (P) *LIB\$*, LIB-58

LIB\$CRF_OUTPUT routine, (P) *LIB\$*, LIB-61

LIB\$CURRENCY routine, (P) *LIB\$*, LIB-65

LIB\$CVTF_FROM_INTERNAL_TIME routine, (P) *LIB\$*, LIB-67

LIB\$CVTF_TO_INTERNAL_TIME routine, (P) *LIB\$*, LIB-69

LIB\$CVT_DTB routine, (P) *LIB\$*, LIB-83

LIB\$CVT_DX_DX routine, (P) *LIB\$*, LIB-71

LIB\$CVT_FROM_INTERNAL_TIME routine, (P) *LIB\$*, LIB-76

LIB\$CVT_HTB routine, (P) *LIB\$*, LIB-83

LIB\$CVT_OTB routine, (P) *LIB\$*, LIB-83

LIB\$CVT_TO_INTERNAL_TIME routine, (P) *LIB\$*, LIB-79

LIB\$CVT_VECTIM routine, (P) *LIB\$*, LIB-81

LIB\$DATE_TIME routine, (P) *Concepts*, 5-9; (P) *LIB\$*, LIB-85

LIB\$DAY routine, (P) *Concepts*, 5-5; (P) *LIB\$*, LIB-86

LIB\$DAY_OF_WEEK routine, (P) *LIB\$*, LIB-88

LIB\$DECODE_FAULT routine, (P) *Concepts*, 13-73; (P) *LIB\$*, LIB-90

LIB\$DEC_OVER routine, (P) *Concepts*, 13-17; (P) *LIB\$*, LIB-109

LIB\$DELETE_FILE routine, (P) *LIB\$*, LIB-111

LIB\$DELETE_LOGICAL routine, (P) *Concepts*, 6-8; (P) *LIB\$*, LIB-119

LIB\$DELETE_SYMBOL routine, (P) *Concepts*, 6-8; (P) *LIB\$*, LIB-121

LIB\$DELETE_VM_ZONE routine, (P) *Concepts*, 21-7, 21-13; (P) *LIB\$*, LIB-123

LIB\$DIGIT_SEP routine, (P) *LIB\$*, LIB-125

LIB\$DISABLE_CTRL routine, (P) *Concepts*, 6-9; (P) *LIB\$*, LIB-127

LIB\$DO_COMMAND routine, (P) *Concepts*, 6-7; (P) *LIB\$*, LIB-129

LIB\$EDIV routine, (P) *LIB\$*, LIB-131

LIB\$EMODD routine, (P) *LIB\$*, LIB-133

LIB\$EMODF routine, (P) *LIB\$*, LIB-135

LIB\$EMODG routine, (P) *LIB\$*, LIB-137

LIB\$EMODH routine, (P) *LIB\$*, LIB-139

LIB\$EMUL routine, (P) *LIB\$*, LIB-141

LIB\$ENABLE_CTRL routine, (P) *Concepts*, 6-9; (P) *LIB\$*, LIB-143

LIB\$ESTABLISH, (G) *Compatibility*, 4-4

LIB\$ESTABLISH routine, (P) *Concepts*, 13-4, 13-42; (P) *LIB\$*, LIB-145

LIB\$EXPAND_NODENAME routine, (P) *LIB\$*, LIB-147

LIB\$EXTV routine, (P) *LIB\$*, LIB-150

LIB\$EXTZV routine, (P) *LIB\$*, LIB-153

LIB\$FFC routine, (P) *LIB\$*, LIB-155

LIB\$FFS routine, (P) *LIB\$*, LIB-155

LIB\$FID_TO_NAME routine, (P) *LIB\$*, LIB-157

LIB\$FILE_SCAN routine, (P) *LIB\$*, LIB-159

LIB\$FILE_SCAN_END routine, (P) *LIB\$*, LIB-161

LIB\$FIND_FILE routine, (P) *LIB\$*, LIB-163; (P) *File Appl*, 5-8 to 5-12

LIB\$FIND_FILE_END routine, (P) *LIB\$*, LIB-167

LIB\$FIND_IMAGE_SYMBOL routine, (P) *LIB\$*, LIB-168

LIB\$FIND_VM_ZONE routine, (P) *Concepts*, 21-7; (P) *LIB\$*, LIB-171

LIB\$FIT_NODENAME routine, (P) *LIB\$*, LIB-173

LIB\$FIXUP_FLT routine, (P) *Concepts*, 13-72; (P) *LIB\$*, LIB-176

LIB\$FLT_UNDER procedure call, (P) *Interfaces*, 2-14

LIB\$FLT_UNDER routine, (P) *Concepts*, 13-17; (P) *LIB\$*, LIB-178

LIB\$FORMAT_DATE_TIME routine, (P) *LIB\$*, LIB-180

LIB\$FORMAT_SOGW_PROT routine, (P) *LIB\$*, LIB-183

LIB\$FREE_DATE_TIME_CONTEXT routine, (P) *LIB\$*, LIB-186

LIB\$FREE_EF routine, (P) *LIB\$*, LIB-187

LIB\$FREE_LUN routine, (P) *LIB\$*, LIB-188
LIB\$FREE_TIMER routine, (P) *Concepts*, 5-19;
(P) *LIB\$*, LIB-189
LIB\$FREE_VM routine, (P) *Concepts*, 19-6, 20-4;
(P) *LIB\$*, LIB-190
LIB\$FREE_VM_PAGE routine, (P) *Concepts*,
19-6, 20-4; (P) *LIB\$*, LIB-192
LIB\$GETDVI routine, (P) *LIB\$*, LIB-194
LIB\$GETJPI routine, (P) *LIB\$*, LIB-199
LIB\$GETQUI routine, (P) *Concepts*, 5-21; (P)
LIB\$, LIB-204
LIB\$GETSYI routine, (P) *LIB\$*, LIB-209
LIB\$GET_ACCNAM routine, (P) *LIB\$*, LIB-213
LIB\$GET_ACCNAM_BY_CONTEXT routine, (P)
LIB\$, LIB-215
LIB\$GET_COMMAND routine, (P) *LIB\$*,
LIB-217
LIB\$GET_COMMON routine, (P) *Concepts*, 2-6,
6-5; (P) *LIB\$*, LIB-220
LIB\$GET_CURR_INVO_CONTEXT routine, (P)
Calling Std, 3-34; (P) *LIB\$*, LIB-222
LIB\$GET_DATE_FORMAT routine, (P) *LIB\$*,
LIB-223
LIB\$GET_EF routine, (P) *LIB\$*, LIB-225
LIB\$GET_FOREIGN routine, (P) *Concepts*, 6-3;
(P) *LIB\$*, LIB-227
LIB\$GET_FULLNAME_OFFSET routine, (P)
LIB\$, LIB-231
LIB\$GET_HOSTNAME routine, (P) *LIB\$*,
LIB-233
LIB\$GET_INPUT procedure call, (P) *Interfaces*,
3-4
LIB\$GET_INPUT routine, (P) *Concepts*, 7-4 to
7-6; (P) *LIB\$*, LIB-235; (P) *STR\$*, 2-8
example, (P) *Concepts*, 7-4
example of use in RMS program, (P) *RMS Ref*,
A-23
obtaining several lines of input, (P) *Concepts*,
7-5
obtaining single line of input, (P) *Concepts*, 7-4
prompt, (P) *Concepts*, 7-4
LIB\$GET_INVO_CONTEXT routine, (P) *Calling*
Std, 3-34; (P) *LIB\$*, LIB-238
LIB\$GET_INVO_HANDLE routine, (P) *Calling*
Std, 3-35; (P) *LIB\$*, LIB-239
LIB\$GET_LUN routine, (P) *LIB\$*, LIB-240
LIB\$GET_MAXIMUM_DATE_LENGTH routine,
(P) *LIB\$*, LIB-241
LIB\$GET_PREV_INVO_CONTEXT routine, (P)
Calling Std, 3-35; (P) *LIB\$*, LIB-243
LIB\$GET_PREV_INVO_HANDLE routine, (P)
Calling Std, 3-36; (P) *LIB\$*, LIB-244
LIB\$GET_SYMBOL routine, (P) *Concepts*, 6-8;
(P) *LIB\$*, LIB-245
LIB\$GET_USERS_LANGUAGE routine, (P)
LIB\$, LIB-248
LIB\$GET_VM routine, (P) *Concepts*, 19-6, 20-4;
(P) *LIB\$*, LIB-249; (P) *STR\$*, 2-3
LIB\$GET_VM_PAGE routine, (P) *Concepts*, 19-6,
20-4; (P) *LIB\$*, LIB-251
LIB\$ICHAR routine, (P) *LIB\$*, LIB-253
LIB\$INDEX routine, (P) *LIB\$*, LIB-255
LIB\$INITIALIZE logical name, (P) *Debugger*,
13-9
LIB\$INITIALIZE routine, (P) *Concepts*, 16-1
LIB\$INITIALIZE RTL procedure, (P) *Modular*
Proc, 3-13
LIB\$INIT_DATE_TIME_CONTEXT routine, (P)
LIB\$, LIB-257
LIB\$INIT_TIMER routine, (P) *Concepts*, 5-18;
(P) *LIB\$*, LIB-261
LIB\$INSERT_KEY routine, (P) *Util Routines*,
LBR-19
LIB\$INSERT_TREE routine, (P) *Concepts*, 6-29;
(P) *LIB\$*, LIB-263
LIB\$INSQHI routine, (P) *LIB\$*, LIB-274
LIB\$INSQTI routine, (P) *LIB\$*, LIB-277
LIB\$INSV routine, (P) *LIB\$*, LIB-279
LIB\$INT_OVER routine, (P) *Concepts*, 13-17; (P)
LIB\$, LIB-281
LIB\$LEN routine, (P) *LIB\$*, LIB-283
LIB\$LOCC routine, (P) *LIB\$*, LIB-284
LIB\$LOOKUP_KEY routine, (P) *LIB\$*, LIB-287
LIB\$LOOKUP_TREE routine, (P) *Concepts*, 6-29;
(P) *LIB\$*, LIB-291
LIB\$LP_LINES routine, (P) *LIB\$*, LIB-293
LIB\$MATCHC routine, (P) *LIB\$*, LIB-295
LIB\$MATCH_COND routine, (P) *Concepts*, 13-33,
13-65, 13-72; (P) *LIB\$*, LIB-297
LIB\$MOVC3 routine, (P) *LIB\$*, LIB-300
LIB\$MOVC5 routine, (P) *LIB\$*, LIB-302
LIB\$MOVTC routine, (P) *LIB\$*, LIB-304
LIB\$MOVTUC routine, (P) *LIB\$*, LIB-321
LIB\$MULTF_DELTA_TIME routine, (P) *Concepts*,
5-7; (P) *LIB\$*, LIB-324
LIB\$MULT_DELTA_TIME routine, (P) *Concepts*,
5-7; (P) *LIB\$*, LIB-325
LIB\$PARSE_ACCESS_CODE routine, (P) *LIB\$*,
LIB-326
LIB\$PARSE_SOGW_PROT routine, (P) *LIB\$*,
LIB-328
LIB\$PAUSE routine, (P) *LIB\$*, LIB-331
LIB\$POLYD routine, (P) *LIB\$*, LIB-332
LIB\$POLYF routine, (P) *LIB\$*, LIB-334
LIB\$POLYG routine, (P) *LIB\$*, LIB-337
LIB\$POLYH routine, (P) *LIB\$*, LIB-339
LIB\$PUT_COMMON routine, (P) *Concepts*, 2-6,
6-5; (P) *LIB\$*, LIB-341
LIB\$PUT_INVO_REGISTERS routine, (P)
Calling Std, 3-36; (P) *LIB\$*, LIB-343
LIB\$PUT_OUTPUT routine, (P) *Concepts*, 7-4;
(P) *LIB\$*, LIB-345
example, (P) *Concepts*, 7-7

- LIB\$PUT_OUTPUT routine (cont'd)
 example of use in RMS program, (P) *RMS Ref*, A-23
 writing simple output, (P) *Concepts*, 7-6
- LIB\$RADIX_POINT routine, (P) *LIB\$*, LIB-347
- LIB\$REMQHI routine, (P) *LIB\$*, LIB-349
- LIB\$REMQTI routine, (P) *LIB\$*, LIB-351
- LIB\$RENAME_FILE routine, (P) *LIB\$*, LIB-353
- LIB\$RESERVE_EF routine, (P) *LIB\$*, LIB-361
- LIB\$RESET_VM_ZONE routine, (P) *Concepts*, 21-6, 21-13; (P) *LIB\$*, LIB-363
- LIB\$REVERT routine, (P) *Concepts*, 13-4, 13-5; (P) *LIB\$*, LIB-365
- LIB\$RUN_PROGRAM routine, (P) *Concepts*, 6-5; (P) *LIB\$*, LIB-366
- LIB\$SCANC routine, (P) *LIB\$*, LIB-368
- LIB\$SCOPY_DXDX routine, (P) *LIB\$*, LIB-370; (P) *STR\$*, 2-6
- LIB\$SCOPY_R_DX routine, (P) *LIB\$*, LIB-372
- LIB\$SET_INDEX routine, (P) *Util Routines*, LBR-19
- LIB\$SET_LOGICAL routine, (P) *Concepts*, 6-8; (P) *LIB\$*, LIB-374
- LIB\$SET_SYMBOL routine, (P) *Concepts*, 6-8; (P) *LIB\$*, LIB-378
- LIB\$SFREE1_DD routine, (P) *LIB\$*, LIB-381
- LIB\$SFREEN_DD routine, (P) *LIB\$*, LIB-382
- LIB\$SGET1_DD routine, (P) *LIB\$*, LIB-384
- LIB\$SHOW_TIMER procedure call, (P) *Interfaces*, 3-2
- LIB\$SHOW_TIMER routine, (P) *Concepts*, 5-19; (P) *LIB\$*, LIB-386
- LIB\$SHOW_VM routine, (P) *LIB\$*, LIB-390
- LIB\$SHOW_VM_ZONE routine, (P) *Concepts*, 21-7; (P) *LIB\$*, LIB-393
- LIB\$SIGNAL procedure call, (P) *Interfaces*, 3-2
- LIB\$SIGNAL routine, (P) *Concepts*, 13-3, 13-5, 13-16, 13-28, 13-34, 13-35, 13-50, 13-57, 13-65; (P) *LIB\$*, LIB-399
- generating signals, (P) *Concepts*, 13-30
- invoking, (P) *Concepts*, 13-30
- signaling, (P) *Calling Std*, 6-9, 6-13
- using to signal RMS errors, (P) *RMS Ref*, 2-6
- LIB\$SIG_TO_RET routine, (P) *Concepts*, 13-71; (P) *LIB\$*, LIB-403
- LIB\$SIG_TO_STOP routine, (P) *Concepts*, 13-71; (P) *LIB\$*, LIB-405
- LIB\$SIM_TRAP routine, (P) *Concepts*, 13-64, 13-70; (P) *LIB\$*, LIB-407
- LIB\$SKPC routine, (P) *LIB\$*, LIB-409
- LIB\$SPANC routine, (P) *LIB\$*, LIB-411
- LIB\$SPAWN routine, (P) *Concepts*, 6-9; (P) *LIB\$*, LIB-415
- LIB\$STAT_TIMER routine, (P) *Concepts*, 5-19; (P) *LIB\$*, LIB-421
- LIB\$STAT_VM routine, (P) *LIB\$*, LIB-425
- LIB\$STOP routine, (P) *Concepts*, 13-3, 13-5, 13-7, 13-28, 13-34, 13-35, 13-45, 13-50, 13-57, 13-64, 13-65; (P) *LIB\$*, LIB-427; (P) *File Appl*, 5-12
- generating signals, (P) *Concepts*, 13-30
- using, (P) *Calling Std*, 6-9, 6-11, 6-13
- LIB\$SUBX routine, (P) *Concepts*, 5-7; (P) *LIB\$*, LIB-429
- LIB\$SUB_TIME routine, (P) *Concepts*, 5-7
- LIB\$SUB_TIMES routine, (P) *LIB\$*, LIB-431
- LIB\$SYS_ASCTIM routine, (P) *LIB\$*, LIB-433
- LIB\$SYS_FAOL routine, (P) *LIB\$*, LIB-437
- LIB\$SYS_FAO routine, (P) *LIB\$*, LIB-435
- LIB\$SYS_GETMSG routine, (P) *LIB\$*, LIB-439
- LIB\$TABLEPARSE routine, (P) *LIB\$*, LIB-442
- LIB\$TPARSE routine, (P) *LIB\$*, LIB-442
- LIB\$TRAVERSE_TREE routine, (P) *Concepts*, 6-29; (P) *LIB\$*, LIB-491
- LIB\$TRA_ASC_EBC routine, (P) *LIB\$*, LIB-493
- LIB\$TRA_EBC_ASC routine, (P) *LIB\$*, LIB-497
- LIB\$TRIM_FILESPEC routine, (P) *LIB\$*, LIB-500
- LIB\$TRIM_FULLNAME routine, (P) *LIB\$*, LIB-503
- LIB\$VERIFY_VM_ZONE routine, (P) *Concepts*, 21-7; (P) *LIB\$*, LIB-506
- LIB\$WAIT routine, (P) *LIB\$*, LIB-507
- LIB\$DECOMP.COM command procedure, (S) *Sys Mgr Tuning*, 16-6; (S) *Alpha Perform*, 4-2
- LIB files, (S) *DECamsd*, B-2
- Librarian utility (LIBRARIAN), (G) *SW Overview*, 4-7
- creating libraries, (P) *Environment*, 8-3
- differences, (G) *Compatibility*, 1-11
- LIBRARY command, (P) *Environment*, 8-4
- types of libraries, (P) *Environment*, 8-4
- Librarian utility routines
- See LBR routines
- Libraries
- See also Device control libraries
- closing, (P) *Util Routines*, LBR-7, LBR-8
- default, displaying help, (G) *DCL A-M*, DCLI-232
- default object, (P) *Concepts*, 17-2
- deleting module, (P) *Util Routines*, LBR-16
- initializing, (P) *Util Routines*, LBR-8
- inserting module, (P) *Util Routines*, LBR-10
- listing index entries, (P) *Util Routines*, LBR-26
- macro, (P) *Concepts*, 17-3, 17-5
- message object module, (P) *Concepts*, 13-60
- module header, (P) *Util Routines*, LBR-22
- multiple indexes, (P) *Util Routines*, LBR-19
- multiple keys, (P) *Util Routines*, LBR-19
- object, (P) *Concepts*, 17-2, 17-5
- adding modules, (P) *Concepts*, 17-2
- creating, (P) *Concepts*, 17-2
- deleting a module, (P) *Concepts*, 17-2

Libraries

object (cont'd)

- extracting a module, (P) *Concepts*, 17-2
- listing modules, (P) *Concepts*, 17-2
- replacing modules, (P) *Concepts*, 17-2
- system default, (P) *Concepts*, 17-2
- user default, (P) *Concepts*, 17-2

object module, (G) *DCL A-M*, DCLI-27

opening, (P) *Util Routines*, LBR-7, LBR-8

processing index entry, (P) *Util Routines*, LBR-26

replacing module, (P) *Util Routines*, LBR-10

system default, (P) *Concepts*, 17-5

text, (P) *Concepts*, 17-3

updating, (P) *Modular Proc*, 6-4

user default, (P) *Concepts*, 17-5

LIBRARY command, (G) *DCL A-M*, DCLI-407;
(P) *Environment*, 8-4

/CREATE qualifier, (P) *Concepts*, 17-2

/EXTRACT qualifier, (P) *Concepts*, 17-3

/LIST qualifier, (P) *Concepts*, 17-2

/REPLACE qualifier, (P) *Concepts*, 17-2

Library facility, (P) *Modular Proc*, 3-2

Library files

containing object modules, (P) *Linker*, 1-8

containing shareable images, (P) *Linker*, 1-8

default system libraries

order of processing, (P) *Linker*, 2-18

processing, (P) *Linker*, 2-13, LINK-36,
LINK-37

name table, (P) *Linker*, 2-20

processing during symbol resolution, (P)
Linker, 2-11

selective processing of, (P) *Linker*, 2-15

specifying as linker input, (P) *Linker*, 1-9,
LINK-17, LINK-19

specifying default user libraries, (P) *Linker*,
2-13, LINK-40

types of libraries accepted as linker input, (P)
Linker, 1-8

Library procedures, (P) *Calling Std*, 1-5

/LIBRARY qualifier, (P) *Linker*, LINK-19

effect on symbol resolution processing, (P)
Linker, 2-12

specified with the /INCLUDE qualifier, (P)
Linker, 2-13

specifying libraries as linker input, (P) *Linker*,
1-9

LICENSE command, (G) *DCL A-M*, DCLI-408

License database, (G) *V6.2 New Feat*, 3-18; (S)
Sys Mgr Essentials, 3-8

logical name defining location, (S) *Sys Mgr*
Essentials, 5-8

LICENSE LOAD command

in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-43

License Management Facility

See LMF

License Management Facility (LMF), (S) *Sys Mgr*
Essentials, 3-8, 5-5

License Management utility (LICENSE), (G) *DCL*
N-Z, DCLII-288

LICENSE MODIFY command, (G) *V6.2 New Feat*,
3-18; (S) *Sys Mgr Essentials*, 3-8

Licenses

See also PAKs

deactivating, (S) *Sys Mgmt Util M-Z*, 6-43

displaying active, (G) *DCL N-Z*, DCLII-288

loading, (S) *Sys Mgr Essentials*, 3-8

in system startup, (S) *Sys Mgr Essentials*,
5-5

VMScluster client software, (G) *V6.2 New Feat*,
3-7

Licenses required for installation, (S) *DECamsd*,
A-3

LICENSE UNLOAD command

in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-43

Lifetime

definition of, (P) *DECthreads*, 3-5

Lights out computing, (S) *Dependable*, 3-14, 5-7
case study, (S) *Dependable*, 11-1

CSC operations management, (S) *Dependable*,
11-12

Lightweight procedures

Alpha requirements, (P) *Calling Std*, 3-14

Limited-access accounts, (S) *Security*, 7-4

Limited free memory

analyzing, (S) *Alpha Perform*, 13-14

Limited port, (S) *Sys Mgmt Util A-L*, 13-11,
13-36

LIM option, (P) *Rec Mgmt Util*, 4-11

Lineage

OpenVMS Alpha operating system, (G)
Compatibility, 1-1

Linear recurrence

definition, (P) *MTH\$*, 2-6

%LINE built-in symbol, (P) *Debugger*, B-7

EXAMINE command, (P) *Debugger*, 8-19

EXAMINE/SOURCE command, (P) *Debugger*,
10-4

SET BREAK command, (P) *Debugger*, 7-6

SET TRACE command, (P) *Debugger*, 7-6

STEP command, (P) *Debugger*, 7-2

Line compositions, (P) *SMG\$*, 3-2

Line counters summary, (S) *DECnet Mgmt Util*,
B-7

Line devices

See Communications, controller device

Line editing, (G) *User*, 3-16

inhibiting, (P) *Concepts*, 7-41

Line feed, (P) *Rec Mgmt Util*, 4-32

Linefeed key, (G) *User*, 3-19

Line numbers

displaying or hiding at startup, (P) *Debugger*,
3-28

Line numbers (cont'd)

- in source display, (P) *Debugger*, 3-1, 10-1, 10-3, 10-4
- traceback information, (P) *Debugger*, 6-7, 9-3
- treated as symbol, (P) *Debugger*, 9-9

Line-oriented output, (P) *SMG\$*, 2-8

Line printers

Refer also to the *OpenVMS VAX Card Reader, Line Printer, and LPA11-K I/O User's Reference Manual*

preparing for UETP, (S) *Sys Mgr Tuning*, 17-3, 17-5, 17-8

testing with UETP, (S) *Sys Mgr Tuning*, 17-31

UETP output, (S) *Sys Mgr Tuning*, 17-33

UETP test image, (S) *Sys Mgr Tuning*, 17-34

/LINE qualifier, (P) *Debugger*, 7-9

Lines, (S) *TCP/IP*, 1-2; (S) *DECnet Intro*, 1-2; (S) *DECnet Mgmt*, 1-1

buffers for DDCMP line, (S) *DECnet Mgmt*, 3-42

buffer size, (S) *DECnet Mgmt*, 3-41

CI, (S) *DECnet Mgmt*, 2-11

clearing counters, (S) *DECnet Mgmt Util*, 3-161

commands, (S) *DECnet Mgmt*, 3-36

communications

definition, (S) *Sys Mgr Tuning*, 21-4

connections to port, (S) *DECnet Intro*, 3-4

counters, (S) *DECnet Mgmt*, 3-48; (S) *DECnet Mgmt Util*, 3-161, B-7

database, (S) *DECnet Mgmt*, 3-1

DDCMP, (S) *DECnet Mgmt*, 2-11

dedicated, (S) *DECnet Intro*, 1-7, 1-12

definition, (S) *DECnet Mgmt*, 2-11

device name, (S) *DECnet Mgmt*, 3-36

devices, (S) *DECnet Mgmt Util*, A-1

dialup, (S) *DECnet Intro*, 1-7, 1-12; (S) *DECnet Mgmt*, 5-12

displaying counter information with NCP, (S) *DECnet Intro*, 4-1

dynamic asynchronous, (S) *DECnet Mgmt*, 1-9, 2-14, 5-12

dynamic switching, (S) *DECnet Mgmt*, 2-14

Ethernet, (S) *DECnet Mgmt*, 3-46

identification, (S) *DECnet Mgmt*, 3-36

identifier, (S) *DECnet Intro*, 3-33

installing dynamic asynchronous, (S) *DECnet Mgmt*, 5-14

installing static asynchronous, (S) *DECnet Mgmt*, 5-12

LAN, (S) *DECnet Mgmt*, 2-11

LAPB, (S) *DECnet Mgmt*, 3-37

LAPBE, (S) *DECnet Mgmt*, 3-37

multipoint, (S) *DECnet Mgmt*, 2-12

name, (S) *DECnet Mgmt*, 2-12

network, (S) *Sys Mgr Tuning*, 21-5

definition, (S) *Sys Mgr Tuning*, 21-4

operational state, (S) *DECnet Mgmt*, 3-41

Lines (cont'd)

overflow

controlling, (S) *Sys Mgr Essentials*, 13-43

parameters, (S) *DECnet Mgmt*, 3-38

point-to-point, (S) *DECnet Intro*, 3-4; (S) *DECnet Mgmt*, 2-12

protocol, (S) *DECnet Mgmt*, 3-37

states, (S) *DECnet Mgmt*, 2-12; (S) *DECnet Mgmt Util*, C-1 to C-4

static asynchronous, (S) *DECnet Mgmt*, 1-9, 2-13, 5-12

synchronous DDCMP, (S) *DECnet Intro*, 3-4; (S) *DECnet Mgmt*, 1-3

terminal, (S) *DECnet Intro*, 1-12; (S) *DECnet Mgmt*, 1-9

timers, (S) *DECnet Mgmt*, 3-43

transitions, (S) *DECnet Mgmt Util*, C-1 to C-4

types, (S) *DECnet Mgmt*, 3-38

X.25 testing, (S) *DECnet Mgmt Util*, 3-52

not supported on Alpha systems, (S) *Comparison*, 6-6

Line speeds

setting, (S) *DECnet Mgmt Util*, 4-6, 4-11

Line terminator

terminal, (P) *I/O User*, 5-9

Line_Plot graph, (P) *File Appl*, 4-11, A-2

\$LINK\$ program section name

definition, (P) *Linker*, B-16

Linkable images, (S) *Sys Mgr Tuning*, 16-9

Linkage pair blocks

See LKPs

Linkage pointers, (P) *Calling Std*, 3-39

Linkage sections, (S) *Alpha Perform*, 6-15; (P) *Concepts*, 20-11; (P) *Calling Std*, 3-39

LINK command, (G) *DCL A-M*, DCLI-409; (P) *Debugger*, 5-5, 9-4, 10-1

clustering of input files, (P) *Linker*, 2-16, 2-17, LINK-47

in command procedure, (P) *Linker*, 1-12

invoking, (P) *Linker*, LINK-3

qualifiers, (P) *Linker*, 1-17

/SECTION_BINDING qualifier

GHR feature, (S) *Comparison*, 5-13

/SELECTIVE_SEARCH qualifier, (S) *Sys Mgr Essentials*, 5-23

shareable image, (P) *Debugger*, 9-11

specifying input files, (P) *Linker*, LINK-3

specifying library files, (P) *Linker*, LINK-19

suppressing information messages, (P) *Linker*, LINK-18

Linker, (G) *Compatibility*, 1-11

differences, (G) *Compatibility*, 1-11

features specific to OpenVMS Alpha, (G) *Compatibility*, 1-11, 4-8

Linker map

use in crash dump analysis, (P) *Alpha SDA*, SDA-19; (P) *VAX SDA*, SDA-20

Linker utility, (G) *V6.2 New Feat*, 4-12; (G) *SW Overview*, 4-7; (P) *Environment*, 8-1
Alpha object language, (P) *Linker*, B-1
clustering of input files, (P) *Linker*, 2-16, 2-17
command qualifier summary, (P) *Environment*, 8-2

functional overview, (P) *Linker*, 1-2
how to invoke, (P) *Linker*, 1-3
image map, (P) *Linker*, 5-1
image maps, (P) *Environment*, 8-3
input, (P) *Environment*, 8-1
linking against SYS.STB, (S) *Sys Mgr*

Essentials, 5-23
object language, (P) *Environment*, 8-3
options file, (P) *Environment*, 8-3
options summary, (P) *Linker*, 1-19
output, (P) *Environment*, 8-1
qualifiers, (P) *Linker*, 1-17
searching object libraries, (P) *Concepts*, 17-2
specifying input files, (P) *Linker*, LINK-3
symbol resolution processing, (P) *Linker*, 2-1
types of input files, (P) *Linker*, 1-1, 1-4
types of output files, (P) *Linker*, 1-1, 1-12
VAX object language, (P) *Linker*, A-1

Linking

creating native Alpha images, (G)
Compatibility, 4-7

Linking services, (P) *Environment*, 2-4

Linking to OpenVMS Images, (P) *DECthreads*, B-2

Link operations

obtaining statistical information about, (P)
Linker, 5-11

Link option specification records

analyzing in object files, (G) *DCL A-M*,
DCLI-27

Links

See also Logical links

automatic disconnection, (S) *DECnet Intro*, 3-3
creating with LATCP, (S) *Sys Mgmt Util A-L*,
13-7

deleting with LATCP, (S) *Sys Mgmt Util A-L*,
13-19

disconnecting, (S) *DECnet Mgmt Util*, 3-40
disconnecting logical from local node, (S)

DECnet Mgmt Util, 3-40

displaying characteristics using LATCP, (S)
Sys Mgmt Util A-L, 13-45

displaying counters using LATCP, (S) *Sys*
Mgmt Util A-L, 13-42

displaying information using LATCP, (S) *Sys*
Mgmt Util A-L, 13-41

fiber optic, (S) *DECnet Intro*, 1-7

microwave, (S) *DECnet Intro*, 1-2, 1-7

modifying characteristics using LATCP, (S) *Sys*
Mgmt Util A-L, 13-26

name options in LATCP, (S) *Sys Mgmt Util*
A-L, 13-7

Links (cont'd)

satellite, (S) *DECnet Intro*, 1-2, 1-7

state of in LAT environment, (S) *Sys Mgmt*
Util A-L, 13-9

states, (S) *DECnet Mgmt Util*, C-5

terminating dynamic asynchronous, (S)

Security, 12-18; (S) *DECnet Intro*, 3-28

LINK/SHAREABLE command, (P) *Concepts*, 17-7

LINK_CACHE_ENABLE attribute, (P) *Rec Mgmt*
Util, 4-31

LINK_TIMEOUT attribute, (P) *Rec Mgmt Util*,
4-31

LIST CIRCUIT command, (S) *DECnet Mgmt Util*,
3-120

LIST command, (S) *DECnet Intro*, 4-1; (S)

DECnet Mgmt, 3-72

in Install utility, (S) *Sys Mgmt Util A-L*, 11-12
to display network configuration database, (S)

DECnet Intro, 3-34

LIST DEVICE command

in LANCP utility, (S) *Sys Mgmt Util A-L*,
12-17

Listener devices

capturing audit event messages, (S) *Security*,
9-16

disabling, (S) *Security*, 9-16

example of programs for, (S) *Security*, 9-17

LISTEN_TIME system parameter, (S) *VMScluster*
Sys, 3-20

LISTER.COM command procedure, (G) *User*,
C-23

sample execution, (G) *User*, C-25

LIST EXECUTOR command, (S) *DECnet Mgmt*
Util, 3-125

Listing

network proxy database, (S) *Sys Mgmt Util*
A-L, 5-34

rights database, (S) *Sys Mgmt Util A-L*, 5-33,
5-35

system user authorization file (SYSUAF), (S)
Sys Mgmt Util A-L, 5-31

Listing files in directories, (G) *DCL A-M*,
DCLI-161

Listing save-set information, (S) *Sys Mgmt Util*
A-L, 7-18, 7-32, 7-44

LIST LINE command, (S) *DECnet Mgmt Util*,
3-128

LIST LOGGING command, (S) *DECnet Mgmt*
Util, 3-133

LIST MODULE CONFIGURATOR command, (S)
DECnet Mgmt Util, 3-136

LIST MODULE X25-ACCESS command, (S)
DECnet Mgmt Util, 3-139

LIST MODULE X25-PROTOCOL command, (S)
DECnet Mgmt Util, 3-141

- LIST MODULE X25-SERVER command, (S) *DECnet Mgmt Util*, 3-145
- LIST MODULE X29-SERVER command, (S) *DECnet Mgmt Util*, 3-145
- LIST NODE command, (S) *DECnet Intro*, 3-34; (S) *DECnet Mgmt Util*, 3-147
 - in LANCP utility, (S) *Sys Mgmt Util A-L*, 12-18
- LIST OBJECT command, (S) *DECnet Mgmt Util*, 3-152
- List operations
 - with BACKUP, (S) *Sys Mgr Essentials*, 10-19
- /LIST qualifier, (S) *Sys Mgmt Util A-L*, 3-5; (P) *Debugger*, 10-1
 - in Analyze/Disk_Structure utility, (S) *Sys Mgmt Util A-L*, 3-8
 - in Backup utility, (S) *Sys Mgmt Util A-L*, 7-44
- LIBRARY command, (P) *Concepts*, 17-2
- \$LITERAL\$ program section name
 - definition, (P) *Linker*, B-16
- Literal characters
 - including in command procedures, (G) *User*, 15-10
- Literal text
 - character strings, (G) *User*, 16-9
- Live mode, (S) *Alpha Perform*, 11-6
 - See Monitor utility
- LK201-specific editing commands, (S) *Sys Mgmt Util A-L*, A-5
- LKBs (lock blocks), (P) *Alpha SDA*, SDA-108
 - displaying only cached, (P) *VAX SDA*, SDA-122
- LKPs (linkage pair blocks), (P) *Calling Std*, 3-40
- LM\$JOURNAL file type, (S) *Sys Mgr Tuning*, 25-3
- LMF\$GROUP_TABLE.EXE file
 - global symbols, (P) *VAX SDA*, SDA-64
- LMF\$LICENSE logical name
 - defining during system startup, (S) *Sys Mgr Essentials*, 5-8
- LMF (License Management Facility), (G) *SW Overview*, 3-9, 7-7; (S) *VMScLuster Sys*, 1-8
 - installing DECnet for OpenVMS license, (S) *DECnet Intro*, 3-10; (S) *DECnet Mgmt*, 6-1
 - on OpenVMS Alpha systems, (S) *Comparison*, 2-13
- LNK\$LIBRARY logical name, (P) *Linker*, LINK-41
 - processing of, (P) *Linker*, 2-13
- LNK\$LIBRARY routine, (P) *Concepts*, 17-2
- LNK\$OPEN_LIB logical name
 - open systems library processing, (P) *Linker*, 2-14
- LNМ symbol, (P) *VAX SDA*, SDA-18
- In routine, (P) *Portable Math*, DPML-42, B-10
- Load assist agent, (S) *DECnet Mgmt*, 4-10
- Load balancing, (S) *Sys Mgmt Util A-L*, 13-15, 13-40; (S) *Alpha Perform*, 8-3; (S) *VMScLuster Sys*, 7-1
 - and CPU power, (S) *Sys Mgmt Util A-L*, 13-28
 - devices served by MSCP, (S) *VMScLuster Sys*, 6-17
 - in VMScLuster environments, (S) *VMScLuster Sys*, 5-1
 - of CPU resource in a network, (S) *VAX Perform*, 3-19
 - of CPU resource in a VAXcluster, (S) *VAX Perform*, 3-19
 - of CPU resource in a VMScLuster, (S) *Alpha Perform*, 9-11
 - of disk I/O resource, (S) *VAX Perform*, 3-41; (S) *Alpha Perform*, 11-10
 - of memory resource, (S) *VAX Perform*, 3-23, 3-26, 3-29; (S) *Alpha Perform*, 10-4, 10-7, 10-11
 - using LAT software, (S) *Sys Mgr Tuning*, 24-3
- LOAD command
 - in SYSGEN, (S) *Sys Mgmt Util M-Z*, 5-14
 - in SYSGEN (VAX), (S) *Sys Mgr Essentials*, 7-7
- Loader changes, (S) *Comparison*, 5-15
- Loading device drivers
 - automatically, (S) *Sys Mgr Essentials*, 7-6, 7-7
 - manually, (S) *Sys Mgr Essentials*, 7-8
 - on VAX, (S) *Sys Mgr Essentials*, 7-7
 - on Alpha systems, (S) *Sys Mgmt Util M-Z*, 6-33, 6-34, 6-37
- Loading downline
 - See Downline system loads
- Loading I/O driver, (S) *Sys Mgmt Util M-Z*, 5-14
- Loading I/O drivers, (S) *Comparison*, A-6
- Load leveling
 - dynamic, (S) *Sys Mgr Tuning*, 26-2
- Load-locked instructions, (P) *Concepts*, 14-8, 14-13
- LOAD NODE command, (S) *DECnet Mgmt*, 4-2, 4-6; (S) *DECnet Mgmt Util*, 3-44
 - overriding default parameters, (S) *DECnet Mgmt*, 4-8
- LOADS logical name, (S) *Sys Mgr Tuning*, 17-34
- Load/start MSCP server, (S) *Sys Mgmt Util M-Z*, 5-14
- Load tests
 - defining user load for UETP, (S) *Sys Mgr Tuning*, 17-14
 - description, (S) *Sys Mgr Tuning*, 17-34
 - error during UETP, (S) *Sys Mgr Tuning*, 17-27
 - running individually, (S) *Sys Mgr Tuning*, 17-13
- Load Trace facility, (G) *V6.2 New Feat*, 6-23; (S) *Sys Mgr Tuning*, 22-25

- LOAD VIA command, (S) *DECnet Mgmt*, 4-6; (S) *DECnet Mgmt Util*, 3-47
- LOAD_DECNET_IMAGES
 - AUTOGEN pseudoparameter, (G) *V6.2 New Feat*, 3-15
- LOAD_PWD_POLICY system parameter, (S) *Security*, C-10
- LOA option, (P) *Rec Mgmt Util*, 4-10, 4-11
- Local area disk
 - See LAD
- Local Area Disk Control Program
 - See LAD Control Program (LADCP) utility
- Local Area Network Auxiliary Control Program
 - See LAN Auxiliary Control Program utility
- Local area networks
 - See LANs
- Local area systems transport
 - See LAST
- Local Area Transport Control Program
 - See LAT Control Program (LATCP) utility
- Local area transports
 - See LATs and LAT software
- Local area VMScluster environments, (G) *SW Overview*, 1-8
 - See also VMScluster systems
 - capturing distributed trigger event, (S) *VMScluster Sys*, F-34
 - debugging satellite booting, (S) *VMScluster Sys*, C-2, C-5
 - highly available, (S) *VMScluster Sys*, 3-17
 - network failure analysis, (S) *VMScluster Sys*, C-26
 - setting system date and time, (S) *Sys Mgmt Util M-Z*, 6-16
- Local buffer caching
 - with lock management service, (P) *Concepts*, 15-18
- Local circuits
 - defining at network startup, (S) *DECnet Intro*, 3-32
- LOCALE commands
 - COMPILE, (G) *V6.2 New Feat*, 5-11
 - LOAD, (G) *V6.2 New Feat*, 5-14
 - SHOW CHARACTER_DEFINITIONS, (G) *V6.2 New Feat*, 5-15
 - SHOW CURRENT, (G) *V6.2 New Feat*, 5-16
 - SHOW PUBLIC, (G) *V6.2 New Feat*, 5-18
 - SHOW VALUE, (G) *V6.2 New Feat*, 5-18
 - UNLOAD, (G) *V6.2 New Feat*, 5-15
- Locale file format
 - descriptions of, (G) *V6.2 New Feat*, 5-22 to 5-42
 - locale categories, (G) *V6.2 New Feat*, 5-22, 5-23
- Local event flag state
 - See LEF (local event flag) state
- Local identifiers, (S) *Security*, 4-3; (S) *Sys Mgr Essentials*, 11-11
- Locality of reference, (S) *Alpha Perform*, 10-2
 - definition, (S) *Alpha Perform*, 10-1
- Local loopback tests, (S) *DECnet Mgmt*, 7-6
- Local nodes, (G) *User*, 4-7; (S) *DECnet Intro*, 3-1, 3-10; (S) *DECnet Mgmt*, 1-17, 2-1, 3-5
 - defining at network startup, (S) *DECnet Intro*, 3-32
 - definition, (S) *Sys Mgr Essentials*, 2-13
 - displaying counter with NCP, (S) *DECnet Intro*, 4-1
 - displaying name and address, (S) *DECnet Intro*, 3-2
 - operational state, (S) *DECnet Mgmt*, 3-16
 - restrictions, (S) *DECnet Mgmt*, 6-3
 - setting address, (S) *DECnet Mgmt*, 3-8
 - states, (S) *DECnet Mgmt*, 6-3
- Local page and swap files
 - installing with SATELLITE_PAGE.COM procedure, (S) *Sys Mgr Essentials*, 5-6; (S) *Sys Mgr Tuning*, 15-20
- /LOCAL qualifier, (P) *Debugger*, 12-6
- Local symbols, (G) *DCL A-M*, DCLI-1, DCLI-5; (P) *Concepts*, 17-4; (P) *Debugger*, 9-3
 - signaling with, (P) *Concepts*, 13-61
- Local symbol tables
 - See also GSTs and Global symbols
 - deleting symbols from, (G) *DCL A-M*, DCLI-145
 - entering symbol in, (G) *DCL A-M*, DCLI-274
 - labels in, (G) *User*, 15-4
- Local-to-local loopback tests, (S) *DECnet Mgmt*, 7-5
- Local-to-remote loopback tests, (S) *DECnet Mgmt*, 7-4
- LOCAL_PORTS class
 - adding, (S) *Sys Mgmt Util M-Z*, 4-28
 - fields belonging to, (S) *Sys Mgmt Util M-Z*, 4-23
 - removing, (S) *Sys Mgmt Util M-Z*, 4-45
- Locate mode
 - See also RAB\$V_LOC option
 - comparing with move mode for buffer handling, (P) *RMS Ref*, 6-16
 - record retrieval and, (P) *File Appl*, 8-2
- LOCATE_MODE attribute, (P) *Rec Mgmt Util*, 4-11
- Location
 - of page file, (S) *Sys Mgr Tuning*, 15-3, 15-5
 - specifying alternate, (S) *Sys Mgr Tuning*, 15-24
 - of queue database, (S) *Sys Mgr Essentials*, 12-5, 12-7
 - master file, (S) *Sys Mgr Essentials*, 12-6

- Location
 - of queue database (cont'd)
 - queue and journal files, (S) *Sys Mgr Essentials*, 12-6
 - changing, (S) *Sys Mgr Essentials*, 12-6
 - of swap file, (S) *Sys Mgr Tuning*, 15-5
 - specifying alternate, (S) *Sys Mgr Tuning*, 15-24
 - of system dump file, (S) *Sys Mgr Tuning*, 15-2
- Location in memory, (P) *VAX SDA*, SDA-55
- examining, (P) *Alpha SDA*, SDA-48
- SDA default, (P) *Alpha SDA*, SDA-48
- translating to instruction, (P) *Alpha SDA*, SDA-48
- Location of software products, (S) *Sys Mgr Essentials*, 3-28
- Locators
 - obtaining data from, (P) *SMG\$*, 3-1
- Lock access, (S) *Security*, 5-19
- Lock blocks
 - See LKBs
- LOCK class record
 - in Monitor utility, (S) *Sys Mgmt Util M-Z*, A-22
- Lock contention
 - error messages, (S) *DECamds*, 3-10
- Lock Contention Summary window, (S) *DECamds*, 3-8 to 3-10
- default data collection, (S) *DECamds*, 5-2
- detailed data, (S) *DECamds*, 3-18
- recording information, (S) *DECamds*, B-4
- Lock database
 - in a VMScluster, (P) *Sys Svc I*, SYS1-376
- LOCKDIRWT system parameter, (S) *VMScluster Sys*, A-2
- used to control lock resource trees, (S) *VMScluster Sys*, 2-16
- /LOCKID qualifier, (P) *Alpha SDA*, SDA-139; (P) *VAX SDA*, SDA-160
- Locking
 - synchronization in mixed-architecture
 - VMScluster system, (G) *Compatibility*, 4-18, 4-19
- LOCKING.EXE file, (P) *VAX SDA*, SDA-64
- LOCKING.STB file, (P) *Alpha SDA*, SDA-61
- Locking a global mutex, (P) *DECthreads*, cma-49
- Lock limits
 - specifying for detached processes, (G) *DCL N-Z*, DCLII-59
 - specifying for subprocesses, (G) *DCL N-Z*, DCLII-59
- Lock management
 - system services, (P) *Environment*, 10-6, 10-10
- Lock management routines
 - global symbols, (P) *Alpha SDA*, SDA-61; (P) *VAX SDA*, SDA-64
- Lock management system services
 - for interprocess communication, (P) *Concepts*, 2-8
- Lock manager, (G) *SW Overview*, 3-3, 3-18; (S) *VMScluster Sys*, 1-4, 2-15; (P) *Modular Proc*, 3-16; (P) *Concepts*, 15-1; (P) *Interfaces*, B-12
- See also Synchronization
- displaying SDA information, (P) *Alpha SDA*, SDA-107; (P) *VAX SDA*, SDA-122
- Lock-mastering nodes, (P) *File Appl*, 3-33
- Lock mode, (P) *Alpha SDA*, SDA-140; (P) *VAX SDA*, SDA-161
- LOCKPWD flag, (G) *User*, 2-7; (S) *Security*, 3-4
- Lock-requesting nodes, (P) *File Appl*, 3-33
- Lock requests
 - dequeuing, (P) *Sys Svc I*, SYS1-195
 - queuing, (P) *Concepts*, 15-6
 - queuing a lock request, (P) *Concepts*, 15-8
 - queuing asynchronously, (P) *Sys Svc I*, SYS1-253
 - queuing synchronously, (P) *Sys Svc I*, SYS1-264
 - synchronizing, (P) *Concepts*, 15-10
- Lock root, (P) *File Appl*, 3-33
- Locks
 - See also Spin locks
 - automatic investigation, (S) *DECamds*, 5-3
 - choice of mode, (P) *Concepts*, 15-5
 - concept of, (P) *Concepts*, 15-2
 - conversion, (P) *Concepts*, 15-7, 15-12, 15-13
 - deadlock detection, (P) *Concepts*, 15-8
 - dequeuing, (P) *Concepts*, 15-16
 - displaying SDA information, (P) *Alpha SDA*, SDA-139; (P) *VAX SDA*, SDA-160
 - error messages, (S) *DECamds*, 3-19
 - getting information asynchronously, (P) *Sys Svc I*, SYS1-367
 - getting information synchronously, (P) *Sys Svc I*, SYS1-379
 - global, (P) *DECthreads*, 3-4
 - level, (P) *Concepts*, 15-5
 - mode, (P) *Concepts*, 15-5
 - Locks, types of, (S) *DECamds*, 3-19
 - /LOCKS qualifier, (P) *Alpha SDA*, SDA-128; (P) *VAX SDA*, SDA-149
 - Lock status blocks, (P) *Concepts*, 15-11
 - Lock value blocks
 - description, (P) *Concepts*, 15-15
 - using, (P) *Concepts*, 15-18
 - Lock values, (P) *Interfaces*, B-12
 - lock_id data type, (P) *Interfaces*, B-12
 - LOCK_ON_READ attribute, (P) *Rec Mgmt Util*, 4-11; (P) *File Appl*, 7-11

- LOCK_ON_WRITE attribute, (P) *Rec Mgmt Util*, 4-11; (P) *File Appl*, 7-11
- lock_status_block data type, (P) *Interfaces*, B-12
- lock_value_block data type, (P) *Interfaces*, B-13
- log10 routine, (P) *Portable Math*, DPML-42, B-10
- log1p routine, (P) *Portable Math*, DPML-42, B-10
- log2 routine, (P) *Portable Math*, DPML-42, B-10
- Logarithm
- base 2, (P) *MTH\$*, MTH-94, MTH-115
 - common, (P) *MTH\$*, MTH-96, MTH-117
 - logb, convert to double-precision floating-point, (P) *Portable Math*, DPML-43
 - natural, (P) *MTH\$*, MTH-92, MTH-113
 - natural complex, (P) *MTH\$*, MTH-34, MTH-36
- logb routine, (P) *Portable Math*, DPML-43, B-10
- Log files, (G) *SW Overview*, 3-11; (S) *Alpha Perform*, 2-2; (S) *DECamsd*, B-4
- as command procedure, (P) *Debugger*, 12-5
 - contents of, (G) *User*, 18-14
 - debugger, (P) *Debugger*, 12-5
 - examining during execution of batch jobs, (G) *User*, 18-15
 - for batch jobs, (G) *User*, 18-14
 - generated by UETP
 - OLDUETP.LOG, (S) *Sys Mgr Tuning*, 17-20
 - including command output, (G) *User*, 18-15, 18-16
 - lock contention, (S) *DECamsd*, B-5
 - moving to reduce system disk I/O, (S) *Sys Mgr Tuning*, 16-8
 - name of, (P) *Debugger*, 12-5
 - network, (S) *DECnet Mgmt*, 2-28, 3-62
 - of network events, (S) *DECnet Intro*, 4-4
 - operator
 - maintaining, (S) *Sys Mgr Tuning*, 18-24
 - security alarm messages, (S) *Sys Mgr Tuning*, 18-21
 - setting up, (S) *Sys Mgr Tuning*, 18-22
 - troubleshooting the queue manager, (S) *Sys Mgr Essentials*, 12-14
 - saving, (G) *User*, 18-15
 - security audit, (S) *Sys Mgr Tuning*, 18-2
 - creating new version, (S) *Sys Mgr Tuning*, 18-30
 - reviewing, (S) *Sys Mgr Tuning*, 18-26
- Log files generated by UETP
- during the load test, (S) *Sys Mgr Tuning*, 17-27
 - NETSERVER.LOG, (S) *Sys Mgr Tuning*, 17-26
 - OLDUETP.LOG, (S) *Sys Mgr Tuning*, 17-21
- Logging, (S) *DECnet Mgmt*, 1-17, 2-28
- access to protected objects, (S) *Security*, 4-29
 - commands, (S) *DECnet Mgmt*, 3-62
 - console, (S) *DECnet Mgmt*, 2-28, 3-62
 - consoles
 - default, (S) *DECnet Intro*, 4-4
- Logging (cont'd)
- database, (S) *DECnet Mgmt*, 3-1
 - monitor, (S) *DECnet Mgmt*, 2-28, 3-62, 3-66 to 3-67
 - parameters, (S) *DECnet Mgmt*, 3-63
 - security audit events, (S) *Security*, 9-2, 9-13
 - sink, (S) *DECnet Mgmt*, 2-28, 3-62
 - sinks, (S) *DECnet Intro*, 4-4
 - state, (S) *DECnet Mgmt*, 3-65
 - terminal sessions, (S) *Security*, 6-6
 - Logging event messages, (S) *DECamsd*, B-4
 - Logging in, (G) *DCL A-M*, DCLI-410 to DCLI-413; (S) *Sys Mgr Essentials*, 2-9
 - to a remote host, (S) *Sys Mgr Tuning*, 21-13
 - to operating system, (G) *User*, 2-2; (G) *SW Overview*, 5-1
 - errors, (G) *User*, 2-3
 - example, (G) *User*, 2-2
 - to remote system, (G) *User*, 2-9; (G) *SW Overview*, 5-2
 - when errors prevent, (S) *Sys Mgr Essentials*, 4-8
 - Logging out, (G) *DCL A-M*, DCLI-414
 - and device accesses, (G) *DCL A-M*, DCLI-14
 - breaking dialup connection, (G) *User*, 2-26; (S) *Security*, 3-20
 - deciding when it is necessary, (S) *Security*, 3-19
 - from disconnected processes, (G) *User*, 18-9; (S) *Security*, 3-20
 - from remote sessions, (G) *User*, 2-24
 - of remote session, (S) *DECnet Intro*, 3-3
 - of the operating system, (G) *User*, 2-24
 - reasons for, (S) *Security*, 3-19
 - security considerations, (G) *User*, 2-25; (S) *Security*, 3-19
 - using command procedure, (S) *Sys Mgr Essentials*, 6-22
 - while using VMSINSTAL.COM command procedure, (S) *Sys Mgr Essentials*, 3-7
 - Logging startup
 - with SYSMAN, (S) *Sys Mgr Essentials*, 4-15
 - Logical-block-position option, (P) *File Appl*, 4-35
 - Logical device names, (G) *User*, 12-9
 - Logical expressions, (G) *User*, 14-19, 14-20
 - Logical I/O access, (S) *Security*, 5-4
 - Logical I/Os
 - operations, (P) *Concepts*, 9-6
 - privilege, (P) *Concepts*, 9-4, 9-5, 9-6
 - Logical links, (S) *DECnet Intro*, 1-2; (S) *DECnet Mgmt*, 1-1, 1-17, 8-8, 8-10, 8-11, 8-14, 8-18
 - aborting, (S) *DECnet Mgmt*, 8-10, 8-30, 8-31
 - access control information, (S) *DECnet Mgmt*, 1-21
 - assigning channel for, (S) *DECnet Mgmt*, 8-18, 8-32
 - commands, (S) *DECnet Mgmt*, 3-56

Logical links (cont'd)

- completing connection of, (S) *DECnet Mgmt*, 8-11, 8-18, 8-28, 8-33
 - control, (S) *DECnet Mgmt*, 2-24, 3-14
 - controlling activity, (S) *DECnet Mgmt*, 3-56
 - default access control information, (S) *DECnet Mgmt*, 1-22
 - definition, (S) *DECnet Mgmt*, 2-24
 - disconnecting, (S) *DECnet Mgmt*, 2-24, 3-56, 8-10, 8-14, 8-30, 8-36
 - handshaking sequence, (S) *DECnet Mgmt*, 8-11
 - inactivity timer, (S) *DECnet Mgmt*, 2-24
 - inbound, (S) *DECnet Mgmt*, 1-21, 3-56
 - incoming timer, (S) *DECnet Mgmt*, 2-24
 - maximum number, (S) *DECnet Mgmt*, 2-24, 3-56
 - network, (S) *Sys Mgr Tuning*, 21-5
 - definition, (S) *Sys Mgr Tuning*, 21-4
 - outbound, (S) *DECnet Mgmt*, 1-21, 3-56
 - outgoing timer, (S) *DECnet Mgmt*, 2-24
 - parameters, (S) *DECnet Mgmt*, 2-24
 - protocol operation, (S) *DECnet Mgmt*, 2-24
 - protocol parameters, (S) *DECnet Mgmt*, 3-56
 - rejecting a request, (S) *DECnet Mgmt*, 8-34
 - requests, (S) *DECnet Mgmt*, 8-8, 8-11, 8-12, 8-18, 8-27, 8-28, 8-32
 - retransmission delay, (S) *DECnet Mgmt*, 2-24
 - retransmission time, (S) *DECnet Mgmt*, 2-24
 - SYS\$NET, (S) *DECnet Mgmt*, 8-12
 - terminating, (S) *DECnet Mgmt*, 8-10, 8-14, 8-19, 8-23, 8-31
 - timers, (S) *DECnet Mgmt*, 3-57
 - troubleshooting problems, (S) *DECnet Intro*, 4-14
- Logical names, (G) *User*, 12-1; (G) *SW Overview*, 5-3; (S) *DECams*, B-1 to B-4; (P) *Concepts*, 9-26, 11-16; (P) *LIB\$, LIB-374*; (P) *File Appl*, 5-4 to 5-7
- See also Symbols
- access modes, (G) *User*, 13-9, 13-10
 - executive, (G) *User*, 13-10
 - user, (G) *User*, 13-10
 - ACCOUNTNG, (S) *Sys Mgr Tuning*, 19-4
 - adding to logical name directory, (G) *User*, 13-13
 - adding to logical name tables, (G) *User*, 13-12
 - AGEN\$FEEDBACK_REQ_TIME, (S) *Sys Mgr Tuning*, 14-21
 - as device names, (S) *DECnet Mgmt*, 1-24
 - as node name, (S) *DECnet Mgmt*, 1-24
 - assigning, (G) *DCL A-M*, DCLI-40, DCLI-115
 - assigning for shareable images, (S) *Sys Mgr Tuning*, 16-17
 - assigning systemwide in system startup, (S) *Sys Mgr Essentials*, 5-8
 - assigning to customize the SHUTDOWN.COM procedure, (S) *Sys Mgr Essentials*, 4-32

Logical names (cont'd)

- assigning to devices, (G) *DCL A-M*, DCLI-14; (S) *Sys Mgr Essentials*, 5-11
- attributes of, (P) *Concepts*, 10-10
- behavior
 - during batch jobs, (G) *User*, 13-23
 - during interactive system operation, (G) *User*, 13-23
 - in nested command procedures, (G) *User*, 13-24
 - when executing a command procedure, (G) *User*, 13-23
 - when opening files, (G) *User*, 13-24
- canceling, (G) *DCL A-M*, DCLI-106
- compared to symbols, (G) *User*, 14-2
- concealed, (G) *User*, 13-6, 13-7
- concealed-device, (P) *File Appl*, 6-14
- creating, (G) *User*, 13-3; (G) *DCL A-M*, DCLI-40, DCLI-115; (P) *Concepts*, 10-15; (P) *Sys Svc I*, SYS1-120
 - ASSIGN command, (G) *User*, 13-3
 - DEFINE command, (G) *User*, 13-3, 13-4
 - for nodes, (G) *User*, 13-4 to 13-5
 - with concealed attribute, (G) *User*, 13-6, 13-7
 - with terminal attribute, (G) *User*, 13-6
 - with translation attributes, (G) *User*, 13-6, 13-7
- creating a search list, (G) *User*, 13-7
 - using a semicolon, (G) *User*, 13-8
 - with wildcards, (G) *User*, 13-8
- creating a table, (G) *DCL A-M*, DCLI-95
- DCL\$PATH, (G) *User*, 14-39
- deassigning using CLOSE command, (G) *DCL A-M*, DCLI-58
- debugger, (P) *Debugger*, 6-2, B-1
- defining, (P) *Concepts*, 10-2
- defining multiple for one equivalence string, (G) *User*, 13-7
- defining shared information, (S) *Dependable*, 8-60
- definition, (G) *User*, 13-1
- deleting, (G) *User*, 13-22; (P) *Concepts*, 10-17; (P) *Sys Svc I*, SYS1-186
- displaying, (G) *User*, 13-20
 - equivalence name for, (G) *DCL N-Z*, DCLII-292, DCLII-348
 - translation of, (G) *DCL N-Z*, DCLII-292, DCLII-348
- displaying access mode, (G) *User*, 13-21
- displaying directory table structure, (G) *User*, 13-22
- displaying logical name tables, (G) *User*, 13-21
- displaying process permanent files, (G) *User*, 13-21
- duplicating, (P) *Concepts*, 10-7
- equivalence strings, (G) *User*, 13-1
- file input, (G) *User*, 13-2

Logical names (cont'd)

- file output, (G) *User*, 13-2
- for interprocess communication, (P) *Concepts*, 2-8
- format convention, (P) *Concepts*, 10-13
- for nodes
 - overriding the access control string, (G) *User*, 13-5
 - using in file specification, (G) *User*, 13-5
- for software product installations, (S) *Sys Mgr Essentials*, 3-28
- for source and destination locations, (S) *Sys Mgr Essentials*, 3-28
- for system components
 - recommended privilege mode, (S) *Sys Mgr Essentials*, 5-9
- getting information about, (P) *Sys Svc II*, SYS2-396
- image rundown, (P) *Concepts*, 10-5
- including in logical name tables, (G) *DCL A-M*, DCLI-40, DCLI-116
- in multiple tables, (G) *User*, 13-31
- in Phone, (G) *User*, 7-3
- in process logical name table, (S) *DECnet Mgmt*, 1-24
- in remote file specification, (S) *DECnet Intro*, 2-4
- LMF\$LICENSE, (S) *Sys Mgr Essentials*, 5-8
- multivalued, (P) *Concepts*, 10-2
- NETNODE_REMOTE, (S) *Sys Mgr Essentials*, 5-8
- NETPROXY, (S) *Sys Mgr Essentials*, 5-8
- overriding source and destination locations, (S) *Sys Mgr Essentials*, 3-28
- privilege modes, (S) *Sys Mgr Essentials*, 5-9; (S) *Sys Mgr Tuning*, 16-15
- process-permanent, (G) *DCL N-Z*, DCLII-55
 - as file specifications, (G) *User*, 13-24
 - available names, (G) *User*, 13-23
 - redefining, (G) *User*, 13-23
 - SYS\$COMMAND, (G) *User*, 13-26
 - SYS\$ERROR, (G) *User*, 13-26
 - SYS\$INPUT, (G) *User*, 13-24
 - SYS\$OUTPUT, (G) *User*, 13-25
- QMAN\$MASTER, (S) *Sys Mgr Essentials*, 12-6
- redefining location of system files, (S) *Sys Mgr Tuning*, 16-8
- RIGHTSLIST, (S) *Sys Mgr Essentials*, 5-8
- rooted-device, (P) *File Appl*, 6-14
- rooted directory, (P) *File Appl*, 6-16
- RTL routines, (P) *LIB\$, LIB-119*
- search lists, (P) *File Appl*, 6-6, 6-8
 - search order, (G) *User*, 13-30
 - with RUN command, (G) *User*, 13-30
 - with wildcards, (G) *User*, 13-29, 13-30
- sending messages to OPCOM, (S) *DECcmds*, 1-9

Logical names (cont'd)

- showing assignments, (G) *DCL N-Z*, DCLII-242
- SHOW_CLUSTER\$INIT, (S) *Sys Mgr Tuning*, 20-14
- SHUTDOWN\$DECNET_MINUTES, (S) *Sys Mgr Essentials*, 4-33
- SHUTDOWN\$DISABLE_AUTOSTART, (S) *Sys Mgr Essentials*, 4-33, 13-56
- SHUTDOWN\$INFORM_NODES, (S) *Sys Mgr Essentials*, 4-33
- SHUTDOWN\$MINIMUM_MINUTES, (S) *Sys Mgr Essentials*, 4-33
- SHUTDOWN\$QUEUE_MINUTES, (S) *Sys Mgr Essentials*, 4-33
- SHUTDOWN\$TIME, (S) *Sys Mgr Essentials*, 4-33
- SHUTDOWN\$VERBOSE, (S) *Sys Mgr Essentials*, 4-33
- specifying as mail addresses, (S) *Sys Mgr Essentials*, 5-33
- STARTUP\$STARTUP_LAYERED, (S) *Sys Mgr Essentials*, 5-18
- STARTUP\$STARTUP_VMS, (S) *Sys Mgr Essentials*, 5-18
- superseding, (P) *Concepts*, 10-9
- SYS\$ANNOUNCE, (S) *Sys Mgr Essentials*, 5-14
- SYS\$AUDIT_SERVER_INHIBIT, (S) *Sys Mgr Essentials*, 5-9; (S) *Sys Mgr Tuning*, 18-27
- SYS\$DECDTM_INHIBIT, (S) *Sys Mgr Tuning*, 25-21
- SYS\$ERRORLOG, (S) *Sys Mgr Essentials*, 5-8
- SYS\$JOURNAL, (S) *Sys Mgr Tuning*, 25-3
- SYS\$MONITOR, (S) *Sys Mgr Essentials*, 5-8
- SYS\$STARTUP, (S) *Sys Mgr Essentials*, 5-2
- SYS\$SYLOGIN, (S) *Sys Mgr Essentials*, 5-17
- SYS\$TIMEZONE_DIFFERENTIAL, (S) *Sys Mgr Essentials*, 5-35
- SYS\$WELCOME, (S) *Sys Mgr Essentials*, 5-15
- system, (S) *VMScluster Sys*, 5-5
- system services, (P) *Concepts*, 10-1
- systemwide, (G) *User*, 13-2
- SYSUAF, (S) *Sys Mgr Essentials*, 5-8
- terminal, (G) *User*, 13-6
- translating, (S) *DECnet Mgmt*, 1-24; (P) *Concepts*, 10-17; (P) *Sys Svc II*, SYS2-396
- translation, (G) *User*, 13-26, 13-27
 - iterative, (G) *User*, 13-27, 13-28
 - modifying, (G) *User*, 13-27
 - search lists, (G) *User*, 13-28, 13-29
 - system defaults, (G) *User*, 13-28
- translation of, (S) *Sys Mgr Essentials*, 5-33; (P) *File Appl*, 6-5, 6-6
- translations
 - requirements for parsing, (P) *RMS Ref*, A-20
- trusted, (S) *Sys Mgr Tuning*, 16-15

Logical names (cont'd)

- UAFALTERNATE, (S) *Sys Mgr Essentials*, 4-10
- use in network application, (S) *DECnet Mgmt*, 1-24
- using in SYSMAN, (S) *Sys Mgr Essentials*, 2-14
- using with public directories, (S) *DECnet Intro*, 2-5
- VMSMAIL_PROFILE, (S) *Sys Mgr Essentials*, 5-8
- with MOUNT, (S) *Sys Mgmt Util M-Z*, 2-5
- with translation attributes, (G) *User*, 13-6, 13-7

Logical names used by UETP

- CTRLNAME, (S) *Sys Mgr Tuning*, 17-32
- LOADS, (S) *Sys Mgr Tuning*, 17-34
- SYS\$INPUT, (S) *Sys Mgr Tuning*, 17-31
- SYS\$OUTPUT, (S) *Sys Mgr Tuning*, 17-33

Logical name system service calls

- SYS\$CRELNM system service, (P) *Concepts*, 10-15
- SYS\$CRELNT system service, (P) *Concepts*, 10-16
- SYS\$DELLNM system service, (P) *Concepts*, 10-17
- SYS\$TRNLNM system service, (P) *Concepts*, 10-18

Logical name tables, (G) *User*, 13-9, 13-10

- adding logical names, (G) *User*, 13-12
- adding to logical name directory, (G) *User*, 13-13
- as protected objects, (S) *Security*, 4-10
- canceling entries, (G) *DCL A-M*, DCLI-108
- canceling system entries, (G) *DCL A-M*, DCLI-108
- contents of process directory table, (G) *User*, 13-15 to 13-17
- contents of system directory table, (G) *User*, 13-17 to 13-20
- controlling access through access control lists, (P) *Util Routines*, ACL-1
- creating, (G) *User*, 13-11; (G) *DCL A-M*, DCLI-95; (P) *Concepts*, 10-16; (P) *Sys Svc I*, SYS1-126
- default, (P) *Concepts*, 10-3
- defining protection, (G) *User*, 13-13
- definition, (S) *Sys Mgr Essentials*, 5-8
- deleting, (G) *User*, 13-22; (G) *DCL A-M*, DCLI-106; (P) *Sys Svc I*, SYS1-186
- directories, (G) *User*, 13-14
- directory, (P) *Concepts*, 10-3
- displaying, (G) *User*, 13-21; (G) *DCL N-Z*, DCLII-292
- displaying directory table structure, (G) *User*, 13-22
- events audited, (S) *Security*, 5-17

Logical name tables (cont'd)

- group, (G) *User*, 13-10, 13-11; (P) *Concepts*, 10-6
 - including logical names, (G) *DCL A-M*, DCLI-42, DCLI-117
 - including system logical name, (G) *DCL A-M*, DCLI-42, DCLI-117
 - job, (G) *User*, 13-10, 13-11; (P) *Concepts*, 10-5
 - specifying quotas, (G) *User*, 13-14
 - predefined logical names, (P) *Concepts*, 10-2
 - privilege requirements, (S) *Security*, 5-16
 - process, (G) *User*, 13-10, 13-11; (P) *Concepts*, 10-4
 - process-private, (G) *User*, 13-10, 13-11, 13-12; (P) *Concepts*, 10-6
 - quotas, (P) *Concepts*, 10-11
 - reestablishing security profile, (S) *Security*, 5-17
 - search list, (P) *Concepts*, 10-14
 - modifying, (P) *Concepts*, 10-14
 - security elements of, (S) *Security*, 5-16
 - shareable, (G) *User*, 13-10, 13-12; (P) *Concepts*, 10-6, 10-17
 - specifying different tables, (G) *User*, 13-9
 - specifying quotas, (G) *User*, 13-14
 - for job table, (G) *User*, 13-14
 - system, (G) *User*, 13-10, 13-11; (P) *Concepts*, 10-6
 - template profiles, (S) *Security*, 5-16
 - types, (P) *Concepts*, 10-2
 - types of access, (S) *Security*, 5-16
 - user-defined, (P) *Concepts*, 10-6
- ## Logical operators, (P) *Alpha SDA*, SDA-12, SDA-13; (P) *VAX SDA*, SDA-16
- See also Operators (mathematical)
- ## LOGICAL option, (P) *File Appl*, 4-35
- ## Logical predecessor, (P) *Debugger*, 8-8, 8-13, 8-19, B-6
- ## Logical queues, (G) *DCL A-M*, DCLI-260
- assigning, (S) *Sys Mgr Essentials*, 13-56
 - deassigning, (G) *DCL A-M*, DCLI-110
 - description, (S) *Sys Mgr Essentials*, 13-4
 - recommended use, (S) *Sys Mgr Essentials*, 13-4, 13-56
- ## Logical successor, (P) *Debugger*, 8-8, 8-13, 8-19, B-6
- ## Logical unit number allocator, (P) *LIB\$*, LIB-240
- ## Logical unit numbers, (P) *Modular Proc*, 2-14
- allocating, (P) *Concepts*, 6-16
- ## logical_name data type, (P) *Interfaces*, B-13
- ## LOGICAL_NAMES.EXE file
- global symbols, (P) *VAX SDA*, SDA-65
- ## LOGICAL_NAMES.STB file
- global symbols, (P) *Alpha SDA*, SDA-61
- ## Login
- remote, (S) *TCP/IP*, 3-3

- Login alarms, (S) *Security*, D-5
 - enabling, (S) *Security*, 9-7
- Login classes, (G) *User*, 2-9; (S) *Security*, 3-5
 - batch, (G) *User*, 2-10; (S) *Security*, 3-7
 - dialup, (G) *User*, 2-9; (S) *Security*, 3-5
 - interactive, (G) *User*, 2-9; (S) *Security*, 3-5
 - local, (G) *User*, 2-9; (S) *Security*, 3-5
 - network, (G) *User*, 2-10; (S) *Security*, 3-7
 - noninteractive, (G) *User*, 2-10; (S) *Security*, 3-7
 - remote, (G) *User*, 2-9; (S) *Security*, 3-5
 - restrictions on, (G) *User*, 2-11; (S) *Security*, 3-8
- Login command procedures, (S) *Sys Mgmt Util A-L*, 5-27
 - See also Command procedures
 - booting without, (S) *Sys Mgr Essentials*, 4-8
 - defining announcements in, (S) *Sys Mgr Essentials*, 5-14
 - defining location of during system startup, (S) *Sys Mgr Essentials*, 5-17
 - definition, (G) *User*, 15-45; (S) *Sys Mgr Essentials*, 5-16, 5-17
 - executing, (G) *DCL A-M*, DCLI-410
 - execution of for batch jobs, (G) *User*, 18-11, 18-12
 - for captive account, (S) *Sys Mgr Essentials*, 6-29
 - sample, (S) *Sys Mgr Essentials*, 6-30
 - for restricted accounts, (S) *Security*, 7-7, 7-9
 - for SYSTEM account, (S) *Sys Mgr Essentials*, 5-16
 - in captive accounts, (G) *User*, 15-46
 - individual, (S) *Sys Mgr Essentials*, 6-19, 6-20
 - sample, (S) *Sys Mgr Essentials*, 6-21
 - in SYSMAN, (S) *Sys Mgr Essentials*, 2-16
 - LOGIN.COM, (S) *Sys Mgr Essentials*, 5-16
 - personal, (G) *User*, 15-45
 - executed as batch jobs, (G) *User*, 18-14
 - proper protection for, (S) *Security*, 8-25
 - setting protection in, (S) *Sys Mgr Essentials*, 9-7
 - specifying alternate, (G) *DCL A-M*, DCLI-410
 - SYLOGIN.COM, (S) *Sys Mgr Essentials*, 5-16
 - systemwide, (S) *Sys Mgr Essentials*, 5-16, 6-20
 - sample, (S) *Sys Mgr Essentials*, 6-20
 - to a remote host, (S) *Sys Mgr Tuning*, 21-13
 - user-specified, (S) *Sys Mgr Essentials*, 6-20
 - when errors prevent you from logging in, (S) *Sys Mgr Essentials*, 4-8
- Login failures
 - alarms, (S) *Security*, D-5
 - and retries, (G) *User*, 2-12
 - auditing, (S) *Security*, 9-7
 - break-in evasion and, (S) *Security*, 3-9
 - causes of, (G) *User*, 2-3, 2-10 to 2-13; (S) *Security*, 3-7
 - dialup logins, (S) *Security*, 3-9
- Login failures (cont'd)
 - expired accounts, (S) *Security*, 3-13
 - login class restrictions and, (S) *Security*, 3-8
 - messages, (G) *User*, 2-8, 19-10; (S) *Security*, 3-6, 3-17
 - password grabber programs, (S) *Security*, 3-14
 - retries and, (S) *Security*, 3-9
 - security audit report and, (S) *Security*, 9-22
 - shift restrictions, (S) *Security*, 3-8
 - system passwords and, (S) *Security*, 3-8
- Login messages, (G) *User*, 2-7; (S) *Security*, 3-5
 - announcement, (G) *User*, 2-7
 - controlling, (S) *Security*, 7-23, 7-24
 - disconnected job, (S) *Security*, 3-6
 - expired password, (G) *User*, 2-3; (S) *Security*, 3-12
 - last successful interactive login, (S) *Security*, 3-6
 - last successful noninteractive login, (S) *Security*, 3-6
 - new mail, (S) *Security*, 3-6
 - number of login failures, (S) *Security*, 3-6
 - suppressing, (G) *User*, 2-8; (S) *Security*, 3-6, 3-17
 - welcome, (S) *Security*, 3-6
- LOGINOUT
 - determining process quota values, (S) *VMScluster Sys*, 10-18
- LOGINOUT.EXE file, (S) *DECnet Mgmt*, 2-31, 2-33, 8-12, 8-29
 - and detached processes, (G) *DCL N-Z*, DCLII-58
- LOGINOUT callback routines, (P) *Util Routines*, LGI-32 to LGI-46
- LOGINOUT callout routines, (P) *Util Routines*, LGI-13 to LGI-32
- LOGINOUT sample program, (P) *Util Routines*, LGI-9
- Logins
 - See also Proxy logins
 - auditing, (S) *Security*, 9-7
 - batch, (G) *User*, 2-10; (S) *Security*, 3-7
 - changing password, (S) *Security*, 3-2
 - changing password during, (G) *User*, 2-16; (S) *Security*, 3-11
 - controlling, (G) *User*, 2-5; (S) *Security*, 3-3
 - controlling number of dialup attempts, (S) *Sys Mgr Essentials*, 11-6
 - default process protection and, (S) *Security*, 5-11
 - dialup, (G) *User*, 2-9; (S) *Security*, 3-5
 - chances to supply password, (G) *User*, 2-12
 - supplying password, (S) *Security*, 3-9
 - disabled
 - by break-in evasion, (G) *User*, 2-12; (S) *Security*, 3-9
 - by shift restriction, (S) *Security*, 3-8

Logins (cont'd)

- expired accounts, (S) *Security*, 3-13
- flags, (S) *Security*, 7-18
- for expired accounts, (G) *User*, 2-17
- interactive, (G) *User*, 2-9; (S) *Security*, 3-4
 - classes of, (S) *Security*, 3-5
 - most recent, (S) *Security*, 3-6
- local, (G) *User*, 2-9; (S) *Security*, 3-5
- monitoring last, (G) *User*, 19-10; (S) *Security*, 3-17
- network, (G) *User*, 2-10; (S) *Security*, 3-7
- noninteractive, (G) *User*, 2-9, 2-10; (S) *Security*, 3-4
 - classes of, (S) *Security*, 3-7
 - most recent, (S) *Security*, 3-6
- permitted time periods, (G) *User*, 2-12; (S) *Security*, 3-8
- proxy, (G) *User*, 2-10
- remote, (G) *User*, 2-9; (G) *Compatibility*, 2-2; (S) *Security*, 3-5
 - logging out, (S) *Security*, 3-19
 - system passwords and, (S) *Security*, 7-14
 - TCP/IP network, (G) *Compatibility*, 2-2
- restricting by function, (S) *Sys Mgr Essentials*, 6-28
- restricting by time, (S) *Sys Mgr Essentials*, 6-27, 6-28
- restricting with system passwords, (S) *Security*, 7-14
- secure terminal server, (S) *Security*, 3-14, 7-25
- security implications, (S) *Security*, 3-2
- sequence of events, (S) *Sys Mgr Essentials*, 6-5
- simplifying for user with Automatic login facility (ALF), (S) *Security*, 7-11
- time out, (S) *Security*, 3-4
- Log in to a remote host, (S) *Sys Mgr Tuning*, 21-13
- Log Manager Control Program (LMCP) utility, (G) *SW Overview*, 3-13; (S) *Sys Mgmt Util A-L*, 14-1
- CLOSE LOG command, (S) *Sys Mgmt Util A-L*, 14-5
- CONVERT LOG command, (S) *Sys Mgmt Util A-L*, 14-5
- CREATE LOG command, (S) *Sys Mgmt Util A-L*, 14-7
- DUMP command, (S) *Sys Mgmt Util A-L*, 14-8
- HELP command, (S) *Sys Mgmt Util A-L*, 14-12
- REPAIR commands, (S) *Sys Mgmt Util A-L*, 14-13, 14-15
- SHOW LOG command, (S) *Sys Mgmt Util A-L*, 14-16
- Logout alarms, (S) *Security*, D-6
- Logout auditing, (S) *Security*, 9-7

- LOGOUT command, (G) *User*, 2-24; (G) *DCL A-M*, DCLI-414; (S) *Security*, 3-20; (S) *Sys Mgr Essentials*, 6-23; (S) *Sys Mgr Tuning*, 26-9
 - entering after clearing screen, (G) *User*, 2-26
 - /FULL qualifier, (G) *User*, 2-24
 - /HANGUP qualifier, (G) *User*, 2-26
 - message, (G) *DCL A-M*, DCLI-414
 - multiple, (G) *DCL A-M*, DCLI-414
- Logout command procedures
 - SYLOGOUT.COM, (S) *Sys Mgr Essentials*, 6-22
- /LOG qualifier
 - in Backup utility, (S) *Sys Mgmt Util A-L*, 7-45
- log routine, (P) *Portable Math*, DPML-42, B-10
- /LOG_DIRECTORY qualifier, (S) *DECamds*, 2-1
- LOG_IO privilege, (S) *Security*, 5-7, A-8
- /LONG qualifier, (P) *Alpha SDA*, SDA-151
- Long-waiting processes, (S) *Alpha Perform*, 6-13
- Longword dump, (G) *DCL A-M*, DCLI-184
- longword_signed data type, (P) *Interfaces*, B-13
- longword_unsigned data type, (P) *Interfaces*, B-13
- Lookaside lists
 - displaying contents, (P) *Alpha SDA*, SDA-120
- Loopback assistance, (S) *DECnet Mgmt*, 7-11
- Loopback connector, (S) *DECnet Mgmt*, 7-6
- Loopback mirrors
 - See MIRRORs
- Loopback mirror testing, (G) *Compatibility*, 2-6; (S) *Comparison*, 6-2
- Loopback tests, (S) *DECnet Intro*, 4-7
 - circuit, (S) *DECnet Mgmt*, 7-6
 - circuit-level, (S) *DECnet Intro*, 4-7, 4-9; (S) *DECnet Mgmt*, 7-1
 - controller, (S) *DECnet Intro*, 4-9; (S) *DECnet Mgmt*, 7-6, 7-8
 - local node, (S) *DECnet Mgmt*, 7-6
 - local-to-local, (S) *DECnet Intro*, 4-8; (S) *DECnet Mgmt*, 7-5
 - local-to-remote, (S) *DECnet Mgmt*, 7-4
 - network
 - definition, (S) *Sys Mgr Tuning*, 21-17
 - node-level, (S) *DECnet Intro*, 4-7; (S) *DECnet Mgmt*, 7-1
 - over Ethernet circuit, (S) *DECnet Mgmt*, 7-9
 - software, (S) *DECnet Intro*, 4-9; (S) *DECnet Mgmt*, 7-6, 7-7
 - to a remote node, (S) *DECnet Mgmt*, 7-2
 - to remote system, (S) *DECnet Mgmt*, 7-9
 - using a loop node name, (S) *DECnet Mgmt*, 7-3
- LOOP CIRCUIT command, (S) *DECnet Mgmt*, 7-6; (S) *DECnet Mgmt Util*, 3-49
- Loop circuit for testing, (S) *DECnet Mgmt Util*, 3-49

LOOP EXECUTOR command, (S) *DECnet Mgmt*, 7-6; (S) *DECnet Mgmt Util*, 3-51
 Looping process fix, (S) *DECamds*, 4-2
 LOOP LINE command, (S) *DECnet Mgmt Util*, 3-52
 not supported on Alpha systems, (S) *Comparison*, 6-6
 LOOP NODE command, (S) *DECnet Intro*, 4-7; (S) *DECnet Mgmt*, 7-2; (S) *DECnet Mgmt Util*, 3-54
 Loop node name, (S) *DECnet Mgmt*, 7-3
 Loop nodes, (S) *DECnet Mgmt Util*, 3-54
 Loops
 definition, (G) *User*, 15-12
 writing, (G) *User*, 15-12
 Loosely coupled system kernels, (S) *Dependable*, 4-5
 Lost files
 recovering, (S) *Sys Mgr Essentials*, 8-56 to 8-58
 Lost paths
 causes, (S) *DECnet Intro*, 3-4
 LPA11-K
 Refer to the *OpenVMS VAX Card Reader, Line Printer, and LPA11-K I/O User's Reference Manual*
 LPBEGIN phase of system startup, (S) *Sys Mgr Essentials*, 5-19; (S) *Sys Mgmt Util M-Z*, 6-71
 LPBETA phase of system startup, (S) *Sys Mgr Essentials*, 5-19; (S) *Sys Mgmt Util M-Z*, 6-71
 LPMAIN phase of system startup, (S) *Sys Mgr Essentials*, 5-19; (S) *Sys Mgmt Util M-Z*, 6-71
 LRPSIZE system parameter, (S) *VMScluster Sys*, 10-17, A-2
 LSE, (P) *Debugger*, 5-4
 LSE/SCA, (G) *SW Overview*, 4-5, 6-15; (P) *Environment*, 5-2, 5-3, 9-5
 COHESION development tool, (S) *Dependable*, 8-58
 LTA device, (S) *Sys Mgmt Util A-L*, 13-28
 LTAn devices, (S) *Sys Mgr Essentials*, 7-11
 LTDRIVER (LAT port driver), (P) *I/O User*, 5-1
 turning on and off, (S) *Sys Mgr Tuning*, 24-9; (S) *Sys Mgmt Util A-L*, 13-3
 LTM (LAN Traffic Monitor), (S) *VMScluster Sys*, 10-26
 planning network growth, (S) *Dependable*, 7-18
 use at CSC lights out data center, (S) *Dependable*, 11-17
 LTPAD process, (S) *Comparison*, 2-4
 Lynx, (S) *TCP/IP*, 3-5

M

MA780 multiport memory
 configuring a dump file for, (P) *VAX SDA*, SDA-5
 Machine check code
 base address, (P) *VAX SDA*, SDA-18
 Machine check errors
 if returned when booting, (S) *Sys Mgr Essentials*, 4-16
 Machine check frames
 displaying in SDA, (P) *Alpha SDA*, SDA-110
 MACRO
 Refer also to the *VAX MACRO and Instruction Set Reference Manual*
 data type declarations, (P) *Interfaces*, B-37
 generating argument lists, (P) *Interfaces*, A-1
 implementation table, (P) *Interfaces*, B-37
 MACRO-32 Compiler, (G) *SW Overview*, 4-6
 MACRO-64, (P) *Environment*, 7-3, 7-8
 MACRO-64 Assembler, (G) *SW Overview*, 4-6
 programming information, (P) *RMS Ref*, A-1
 programming rules, (P) *RMS Ref*, A-5
 VAX MACRO, (G) *SW Overview*, 4-6; (P) *Environment*, 7-3, 7-7
 VAX MACRO-32 compiler, (P) *Environment*, 1-5, 7-3, 7-8
 MACRO-32 compiler, (G) *DCL A-M*, DCLI-415; (G) *Compatibility*, 1-10, 4-5
 alignment, (P) *Concepts*, 22-7
 documentation, (G) *Compatibility*, 3-9
 MACRO-32 Compiler, (G) *DCL A-M*, DCLI-422
 MACRO-64 assembler, (G) *Compatibility*, 1-10, 4-9
 MACRO/ALPHA command, (G) *Compatibility*, A-2
 MACRO command, (G) *DCL A-M*, DCLI-415 to DCLI-421
 Macro fields
 example of initializing, (P) *RMS Ref*, A-5
 setting at run time, (P) *RMS Ref*, A-5
 MACRO instruction
 formatting memory with SDA, (P) *VAX SDA*, SDA-55
 MACRO language, (P) *File Appl*, 3-15, 3-18, 3-28, 4-2
 RMS and, (P) *File Appl*, 9-5
 Macro libraries, (P) *Environment*, 8-4; (P) *Concepts*, 17-5
 MACRO/MIGRATION command, (G) *DCL A-M*, DCLI-422; (G) *Compatibility*, A-2
 MACRO programs
 in network application, (S) *DECnet Mgmt*, 1-18
 Macros
 applicable VAX MACRO syntax rules, (P) *RMS Ref*, A-5

Macros (cont'd)

- block I/O processing, (P) *RMS Ref*, 1-2
 - calling system services, (P) *Interfaces*, A-5
 - control block initialization, (P) *RMS Ref*, A-1
 - expansion, (P) *Interfaces*, A-4
 - file naming, (P) *RMS Ref*, 1-1
 - file processing, (P) *RMS Ref*, 1-1
 - for defining RMS symbols, (P) *RMS Ref*, A-1
 - for initializing RMS control blocks, (P) *RMS Ref*, A-1
 - for invoking RMS at run time, (P) *RMS Ref*, A-1
 - for RMS control block store, (P) *RMS Ref*, A-1
 - generating argument list
 - CALLG instruction, (P) *Interfaces*, A-6
 - CALLS instruction, (P) *Interfaces*, A-6
 - library location, (P) *RMS Ref*, A-2
 - names and control blocks, (P) *RMS Ref*, A-2
 - naming conventions, (P) *RMS Ref*, A-2
 - NISCA, (S) *VMScluster Sys*, F-20
 - record processing, (P) *RMS Ref*, 1-2
 - RMS types, (P) *RMS Ref*, A-1
 - rules applicable to programming, (P) *RMS Ref*, A-5
 - service, (P) *RMS Ref*, A-1
 - syntax applicable to RMS, (P) *RMS Ref*, A-1
 - system services, (P) *Interfaces*, 4-1, A-1
 - using, (P) *RMS Ref*, A-6
- MAD virtual tape unit, (S) *Sys Mgr Tuning*, 23-12
- Magnetic tape ancillary control process
- See MTACP
- Magnetic tape devices
- serving within a cluster, (S) *Sys Mgmt Util M-Z*, C-42
- Magnetic tapes
- See also Tapes
 - function codes, (P) *I/O User*, A-3
 - mounting ANSI-labeled, (S) *Sys Mgmt Util M-Z*, 2-21, 2-23
 - mounting multiple foreign volumes, (S) *Sys Mgmt Util M-Z*, 2-26
 - overriding protection checks, (S) *Sys Mgmt Util M-Z*, 2-27
 - specifying block size for, (S) *Sys Mgmt Util M-Z*, 2-11
 - specifying density for, (S) *Sys Mgmt Util M-Z*, 2-19
 - specifying record size for, (S) *Sys Mgmt Util M-Z*, 2-33
 - status returns, (P) *I/O User*, A-4
 - TU58 magnetic tape
 - See Disk, TU58

Mail

- electronic, (S) *TCP/IP*, 2-5, 3-6

MAIL

- MAIL\$INTERNET_TRANSPORT logical name,
 - (G) *V6.2 New Feat*, 2-5
- managing, (S) *Sys Mgr Essentials*, 6-38
- specifying addresses in Internet format, (G) *V6.2 New Feat*, 2-5
- MAIL\$INIT file, (G) *User*, 6-21
- MAIL\$KEYDEF.INI file, (G) *User*, 6-21
- sample, (G) *User*, 6-21
- MAIL\$MAILFILE_BEGIN routine, (P) *Util Routines*, MAIL-32
- MAIL\$MAILFILE_CLOSE routine, (P) *Util Routines*, MAIL-34
- MAIL\$MAILFILE_COMPRESS routine, (P) *Util Routines*, MAIL-36
- MAIL\$MAILFILE_END routine, (P) *Util Routines*, MAIL-39
- MAIL\$MAILFILE_INFO_FILE routine, (P) *Util Routines*, MAIL-41
- MAIL\$MAILFILE_MODIFY routine, (P) *Util Routines*, MAIL-44
- MAIL\$MAILFILE_OPEN routine, (P) *Util Routines*, MAIL-47
- MAIL\$MAILFILE_PURGE_WASTE routine, (P) *Util Routines*, MAIL-50
- MAIL\$MESSAGE_BEGIN routine, (P) *Util Routines*, MAIL-53
- MAIL\$MESSAGE_COPY routine, (P) *Util Routines*, MAIL-55
- MAIL\$MESSAGE_DELETE routine, (P) *Util Routines*, MAIL-59
- MAIL\$MESSAGE_END routine, (P) *Util Routines*, MAIL-61
- MAIL\$MESSAGE_GET routine, (P) *Util Routines*, MAIL-63
- MAIL\$MESSAGE_INFO routine, (P) *Util Routines*, MAIL-68
- MAIL\$MESSAGE_MODIFY routine, (P) *Util Routines*, MAIL-72
- MAIL\$MESSAGE_SELECT routine, (P) *Util Routines*, MAIL-75
- MAIL\$SEND_ABORT routine, (P) *Util Routines*, MAIL-78
- MAIL\$SEND_ADD_ADDRESS routine, (P) *Util Routines*, MAIL-80
- MAIL\$SEND_ADD_ATTRIBUTE routine, (P) *Util Routines*, MAIL-82
- MAIL\$SEND_ADD_BODYPART routine, (P) *Util Routines*, MAIL-85
- MAIL\$SEND_BEGIN routine, (P) *Util Routines*, MAIL-88
- MAIL\$SEND_END routine, (P) *Util Routines*, MAIL-91
- MAIL\$SEND_MESSAGE routine, (P) *Util Routines*, MAIL-93
- MAIL\$SERVER account
 - enabling default access, (S) *DECnet Mgmt*, 2-25, 5-3, 5-6

MAIL\$USER_BEGIN routine, (P) *Util Routines*, MAIL-95

MAIL\$USER_DELETE_INFO routine, (P) *Util Routines*, MAIL-98

MAIL\$USER_END routine, (P) *Util Routines*, MAIL-100

MAIL\$USER_GET_INFO routine, (P) *Util Routines*, MAIL-102

MAIL\$USER_SET_INFO routine, (P) *Util Routines*, MAIL-106

MAIL (Mail utility)
See Mail utility

Mailboxes, (S) *DECnet Mgmt*, 8-8, 8-25, 8-26; (P) *Concepts*, 2-8, 2-10, 9-39; (P) *Interfaces*, 4-2; (P) *LIB\$*, LIB-12

See also Terminals

assigning channel to, (P) *Sys Svc I*, SYS1-132

controlling access through access control lists, (P) *Util Routines*, ACL-1

creating, (P) *Concepts*, 2-9; (P) *Sys Svc I*, SYS1-132; (P) *I/O User*, 4-1

creation of using SYS\$CREMBX, (S) *DECnet Mgmt*, 8-25

default protection, (S) *Security*, C-4

default security elements, (S) *Security*, 5-6

deleting, (P) *I/O User*, 4-3

deleting permanent, (P) *Sys Svc I*, SYS1-135, SYS1-189

deleting temporary, (P) *Sys Svc I*, SYS1-135

device characteristics, (P) *I/O User*, 4-4

disable terminal, (P) *I/O User*, 5-22

driver, (P) *I/O User*, 4-1

for audit event messages, (S) *Security*, 9-13

for interprocess communication, (P) *Concepts*, 2-8

function codes, (P) *I/O User*, 4-5, A-5

function modifiers

IO\$M_NORSWAIT, (P) *I/O User*, 4-9, 4-11

IO\$M_NOW, (P) *I/O User*, 4-3, 4-5, 4-9, 4-11, 4-13

IO\$M_READATTN, (P) *I/O User*, 4-11

IO\$M_READERCHECK, (P) *I/O User*, 4-9, 4-11, 4-15

IO\$M_SETPROT, (P) *I/O User*, 4-14

IO\$M_STREAM, (P) *I/O User*, 4-5

IO\$M_WRITERCHECK, (P) *I/O User*, 4-5, 4-15

get mailbox information function, (P) *I/O User*, 4-15

I/O functions

IO\$ READLBLK, (P) *I/O User*, 4-5

IO\$ READPBLK, (P) *I/O User*, 4-5

IO\$ READVBLK, (P) *I/O User*, 4-5

IO\$ WRITELBLK, (P) *I/O User*, 4-9

IO\$ WRITEOF, (P) *I/O User*, 4-11

IO\$ WRITEPBLK, (P) *I/O User*, 4-9

Mailboxes

I/O functions (cont'd)

IO\$ WRITEVBLK, (P) *I/O User*, 4-9

I/O status block, (P) *I/O User*, 4-15

input/output

asynchronous, (P) *Concepts*, 2-11

immediate, (P) *Concepts*, 2-11

synchronous, (P) *Concepts*, 2-11

using SYS\$QIO, (P) *Concepts*, 2-11

using SYS\$QIOW, (P) *Concepts*, 2-11

list of operations, (P) *I/O User*, 4-1

message format, (S) *DECnet Mgmt*, 8-26; (P) *I/O User*, 4-4

terminal, (P) *I/O User*, 5-19

message size, (P) *I/O User*, 4-1

modifying security profiles, (S) *Security*, 5-7

multiport memory, (P) *I/O User*, 4-1

name, (P) *Concepts*, 9-42

permanent, (P) *Concepts*, 2-9; (P) *I/O User*, 4-1, 4-3, 4-4

privilege requirements, (S) *Security*, 5-7

process termination, (G) *DCL N-Z*, DCLII-60

programming examples, (P) *I/O User*, 4-17

protection, (P) *Concepts*, 9-4; (P) *I/O User*, 4-1, 4-4, 4-14

read attention AST function, (P) *I/O User*, 4-11

read function, (P) *I/O User*, 4-5

reading data from, (P) *Concepts*, 2-11

set attention AST function, (P) *I/O User*, 4-11

set protection function, (P) *I/O User*, 4-14

status returns, (P) *I/O User*, A-5

SYS\$GETDVI returns, (P) *I/O User*, 4-4

system, (P) *Concepts*, 9-42

messages, (P) *Concepts*, 9-43

system mailbox messages, (S) *DECnet Mgmt*, 8-26

temporary, (P) *Concepts*, 2-9; (P) *I/O User*, 4-1, 4-4

terminal/mailbox interaction, (P) *I/O User*, 5-18

termination, (P) *Concepts*, 3-47

volume protection, (P) *I/O User*, 4-14, 4-15

wait for writer/reader function, (P) *I/O User*, 4-14

write attention AST function, (P) *I/O User*, 4-11

write end-of-file message function, (P) *I/O User*, 4-11

write function, (P) *I/O User*, 4-9

writing data to, (P) *Concepts*, 2-11

MAIL command, (G) *User*, 6-2; (G) *DCL A-M*, DCLI-423

/EDIT qualifier, (G) *User*, 6-17

in network operations, (S) *DECnet Intro*, 2-10

/SUBJECT qualifier, (G) *User*, 6-9

- MAILEDIT.COM command procedure, (G) *User*, 6-19, C-17
 - example, (G) *User*, C-18
- Mail folders
 - creating, (G) *User*, 6-12
 - deleting, (G) *User*, 6-14
 - displaying list of, (G) *User*, 6-13
 - MAIL, (G) *User*, 6-4
 - NEWMAIL, (G) *User*, 6-3
 - selecting, (G) *User*, 6-13
 - WASTEBASKET, (G) *User*, 6-15
- Mailing lists, (S) *TCP/IP*, 3-6
- Mail subdirectories
 - creating, (G) *User*, 6-12
- Mail utility (MAIL), (G) *DCL A-M*, DCLI-423; (G) *SW Overview*, 5-12, 6-21; (P) *Util Routines*, MAIL-1
 - action routine, (P) *Util Routines*, MAIL-7
 - calling sequence, (P) *Util Routines*, MAIL-8
 - folder, (P) *Util Routines*, MAIL-11, MAIL-14
 - mail file, (P) *Util Routines*, MAIL-14
 - send, (P) *Util Routines*, MAIL-16
 - address list, (P) *Util Routines*, MAIL-16
 - creating, (P) *Util Routines*, MAIL-16
 - username type, (P) *Util Routines*, MAIL-16
 - bodypart, creating, (P) *Util Routines*, MAIL-15
 - condition handling, (P) *Util Routines*, MAIL-6
 - context, (P) *Util Routines*, MAIL-3
 - initiating, (P) *Util Routines*, MAIL-4
 - mail file, (P) *Util Routines*, MAIL-9
 - message, (P) *Util Routines*, MAIL-11
 - send, (P) *Util Routines*, MAIL-14
 - terminating, (P) *Util Routines*, MAIL-4
 - user profile, (P) *Util Routines*, MAIL-17
 - controlling notification messages, (S) *Security*, 7-24
 - default access account, (S) *DECnet Intro*, 3-13
 - default access account requirement, (S) *DECnet Intro*, 2-10
 - deleted bytes threshold, (P) *Util Routines*, MAIL-11
 - deleting messages in, (G) *User*, 6-15
 - disk space, reclaiming, (P) *Util Routines*, MAIL-11
 - distribution lists, (G) *User*, 6-7
 - extracting messages to files, (G) *User*, 6-10
 - folder, (P) *Util Routines*, MAIL-2
 - creating, (P) *Util Routines*, MAIL-14
 - deleting, (P) *Util Routines*, MAIL-14
 - folder names, displaying, (P) *Util Routines*, MAIL-11
 - initialization files, (G) *User*, 6-21
 - invoking, (G) *User*, 6-2
 - item code, (P) *Util Routines*, MAIL-7
 - input, (P) *Util Routines*, MAIL-18
- Mail utility (MAIL)
 - item code (cont'd)
 - output, (P) *Util Routines*, MAIL-21
 - item descriptor
 - declaring, (P) *Util Routines*, MAIL-7
 - null, (P) *Util Routines*, MAIL-7
 - item list, (P) *Util Routines*, MAIL-6
 - declaring, (P) *Util Routines*, MAIL-7
 - terminating, (P) *Util Routines*, MAIL-7
 - keypad commands, (G) *User*, 6-20
 - logical name for, (S) *Sys Mgr Essentials*, 5-8
 - MAIL\$SERVER account, default access, (S) *DECnet Mgmt*, 2-25, 5-3, 5-6
 - MAIL\$SYSTEM_FLAGS logical name, (S) *Sys Mgr Essentials*, 5-32
 - mail file, (P) *Util Routines*, MAIL-3
 - alternate, (P) *Util Routines*, MAIL-10
 - closing, (P) *Util Routines*, MAIL-9
 - compressing, (P) *Util Routines*, MAIL-11
 - creating, (P) *Util Routines*, MAIL-14
 - default, (P) *Util Routines*, MAIL-9
 - opening, (P) *Util Routines*, MAIL-9
 - purging, (P) *Util Routines*, MAIL-11
 - specifying, (P) *Util Routines*, MAIL-9 to MAIL-10
 - wastebasket, (P) *Util Routines*, MAIL-11
 - mail file context
 - initiating, (P) *Util Routines*, MAIL-9
 - terminating, (P) *Util Routines*, MAIL-9
 - managing accounts, (S) *Sys Mgr Essentials*, 6-38
 - message attributes, creating, (P) *Util Routines*, MAIL-15
 - message context
 - initiating, (P) *Util Routines*, MAIL-12
 - terminating, (P) *Util Routines*, MAIL-12
 - message format, standard, (P) *Util Routines*, MAIL-1
 - message header, creating, (P) *Util Routines*, MAIL-15
 - message ID, external, (P) *Util Routines*, MAIL-2
 - messages, (P) *Util Routines*, MAIL-1
 - attribute, (P) *Util Routines*, MAIL-15
 - copying, (P) *Util Routines*, MAIL-13
 - creating, (P) *Util Routines*, MAIL-15
 - deleting, (P) *Util Routines*, MAIL-14
 - displaying, (P) *Util Routines*, MAIL-13
 - marking, (P) *Util Routines*, MAIL-13
 - modifying, (P) *Util Routines*, MAIL-13
 - moving, (P) *Util Routines*, MAIL-13
 - printing, (P) *Util Routines*, MAIL-13
 - reading, (P) *Util Routines*, MAIL-13
 - selecting, (P) *Util Routines*, MAIL-12
 - sending, (P) *Util Routines*, MAIL-15, MAIL-16
 - network operations, (S) *DECnet Intro*, 2-2, 2-10, 3-31

Mail utility (MAIL) (cont'd)

- null item list, (P) *Util Routines*, MAIL-7
 - object, (S) *DECnet Mgmt*, 2-5, 2-25, 2-26, 3-60, 5-3, 5-6
 - programming examples, (P) *Util Routines*, MAIL-23
 - reading messages in, (G) *User*, 6-3, 6-22
 - READ/NEW command, (S) *Sys Mgr Essentials*, 5-33
 - security measures, (G) *User*, 6-17
 - send context, (P) *Util Routines*, MAIL-14 to MAIL-15
 - sending AUTOGEN report with, (S) *Sys Mgr Tuning*, 14-22
 - sending files, (G) *User*, 6-8
 - from DCL level, (G) *User*, 4-13, 6-9
 - sending messages over the network, (G) *User*, 6-6
 - setting default editor in, (G) *User*, 6-18
 - signaling error, (P) *Util Routines*, MAIL-6
 - specifying clusterwide node name, (S) *DECnet Intro*, 2-11
 - summary of commands, (G) *User*, 6-21
 - thread, (P) *Util Routines*, MAIL-5
 - transferring text files, (S) *Security*, 12-19
 - user profile database, (P) *Util Routines*, MAIL-3, MAIL-17
 - user profile entry, (P) *Util Routines*, MAIL-3, MAIL-17
 - adding, (P) *Util Routines*, MAIL-18
 - deleting, (P) *Util Routines*, MAIL-18
 - modifying, (S) *Sys Mgr Essentials*, 6-38; (P) *Util Routines*, MAIL-18
 - using EVE in, (G) *User*, 6-17, 6-18
 - using text editors in, (G) *User*, 6-17
- MailWorks, (G) *SW Overview*, 5-13, 6-21
- ## Maintenance
- for a dependable environment, (S) *Dependable*, 5-1
 - preventative
 - scheduling, (S) *Dependable*, 9-9
- ## Maintenance operation module process
- See MOM
- ## Maintenance operation protocol
- See MOP
- ## Maintenance operations
- over the network, (S) *DECnet Mgmt*, 4-1
- ## Maintenance procedure
- menu-driven, (G) *Compatibility*, 1-5
- ## Maintenance tasks
- comparison of batch and print queuing systems on Alpha and VAX systems, (S) *Comparison*, 3-4
 - differences on Alpha and VAX systems, (S) *Comparison*, 3-3
 - Patch utility not supported, (S) *Comparison*, 3-10

Maintenance tasks

- differences on Alpha and VAX systems (cont'd)
 - size of system dump files on Alpha systems, (S) *Comparison*, 3-7
 - similarities on Alpha and VAX systems, (S) *Comparison*, 3-1 to 3-3
- ## Maintenance tasks for secure systems, (S)
- Security*, 6-8
- ## Main window, (P) Debugger, 1-5
- ## Major ID
- specifying value of, (P) *Linker*, LINK-52
- ## Manage access, (S) Security, 5-17
- ## Management
- data, (G) *SW Overview*, 4-18
 - network, (G) *SW Overview*, 3-12
 - OpenVMS servers for PCs, (G) *SW Overview*, 6-23
 - PATHWORKS network, (G) *SW Overview*, 6-24
- ## Managing a multiprocessing environment, (S) Sys Mgr Tuning, 26-3
- ## Managing computing resources, (S) Dependable, 9-1
- ## Managing devices
- magnetic tape
 - tasks for, (S) *Sys Mgr Essentials*, 7-16
 - printers
 - setting characteristics, (S) *Sys Mgr Essentials*, 7-13
 - tasks for, (S) *Sys Mgr Essentials*, 7-13
 - tasks for, (S) *Sys Mgr Essentials*, 7-1
 - terminals
 - setting characteristics, (S) *Sys Mgr Essentials*, 7-9
 - tasks for, (S) *Sys Mgr Essentials*, 7-9
- ## Managing installed software, (S) Sys Mgr Essentials, 3-34
- ## Managing multiple sites, (G) V6.2 New Feat, 8-13
- ## Managing page, swap, and dump files
- tasks for, (S) *Sys Mgr Tuning*, 15-1
- ## Managing performance
- See Performance management
- ## Managing system parameters
- tasks for, (S) *Sys Mgr Tuning*, 14-1
- ## Managing the LAT database size, (S) Sys Mgr Tuning, 24-19
- ## Managing the queue manager and queue database, (S) Sys Mgr Essentials, 12-1
- ## Mandatory updates
- definition, (S) *Sys Mgr Essentials*, 3-5
- ## Manual fix, (S) DECams, 4-7
- ## Manual network configuration, (S) DECnet Intro, 3-11
- ## Manual switching of terminal line, (S) DECnet Intro, 3-27

- MANUAL_UNLOCKING attribute, (P) *Rec Mgmt Util*, 4-11; (P) *File Appl*, 7-14
- MAP command, (P) *Alpha SDA*, SDA-56
- Map files
See Image map files
- Mapped files, (P) *Concepts*, 8-4
closing, (P) *Concepts*, 8-11
saving, (P) *Concepts*, 8-11
- Mapping disk file sections, (P) *Sys Svc I*, SYS1-156
- Mapping options for a sample company, (S) *Dependable*, 2-13
- Mapping pointers
allocating, (G) *DCL A-M*, DCLI-256
resetting for windows, (S) *Sys Mgr Essentials*, 8-24
- Mapping virtual memory
using SOLITARY program section attribute, (P) *Linker*, 3-23
- /MAP qualifier, (P) *Linker*, LINK-20
- Marginal vector consumer
detection of, (S) *Sys Mgr Tuning*, 26-8
- Margins
source display, (P) *Debugger*, 10-8
- Margin size
specifying in forms, (S) *Sys Mgr Essentials*, 13-42
- Masks
EXAMINE/FMASK command, (P) *Debugger*, 15-13
EXAMINE/TMASK command, (P) *Debugger*, 15-13
masked vector operation, (P) *Debugger*, 15-5, 15-9, 15-13
register, VMR, (P) *Debugger*, 15-5, 15-9, 15-13
- mask_byte data type, (P) *Interfaces*, B-13
- mask_longword data type, (P) *Interfaces*, B-13
- mask_quadword data type, (P) *Interfaces*, B-13
- mask_word data type, (P) *Interfaces*, B-13
- MASSBUS disks
dual-ported, (S) *VMScluster Sys*, 6-2
- Mass storage control protocol servers
See MSCP servers
- Mass storage devices
See also Devices, Disks, and Tapes
- Master file directories
See MFDs
- Master file of queue database, (S) *Sys Mgr Essentials*, 12-4
location
specifying, (S) *Sys Mgr Essentials*, 12-6
mounting of disk holding, (S) *Sys Mgr Essentials*, 12-6
- QMAN\$MASTER logical name, (S) *Sys Mgr Essentials*, 12-6
saving, (S) *Sys Mgr Essentials*, 12-12
- Matching vendor products with requirements, (S) *Dependable*, 1-4
- Match size
specifying with DIFFERENCES command, (G) *DCL A-M*, DCLI-155
- Mathematical functions, (G) *SW Overview*, 4-10
using system routines, (P) *Environment*, 10-2
- Mathematics routines
additional routines, (P) *MTH\$*, A-1 to A-18
compatibility, (G) *Compatibility*, 4-12
- MAXACCTJOBS process limit, (S) *Sys Mgr Essentials*, 6-43
- MAXBUF system parameter
limiting size of user's ACL buffer, (P) *RMS Ref*, 13-3
- MAXDETACH process limit, (S) *Sys Mgr Essentials*, 6-43
- MAXIMIZE_VERSION attribute, (P) *Rec Mgmt Util*, 4-20; (P) *File Appl*, 4-31
- Maximum account jobs process limit, (S) *Sys Mgr Essentials*, 6-43
- Maximum buffers
for executor, (S) *DECnet Mgmt*, 3-16
- Maximum detached process limit, (S) *Sys Mgr Essentials*, 6-43
- Maximum network size
comparison on Alpha and VAX systems, (S) *Comparison*, 6-2
- Maximum record number option, (P) *File Appl*, 4-33
- Maximum record size
indexed file, (P) *File Appl*, 3-23
- Maximum record size field
See also FAB\$W_MRS field
default value for remote file access, (P) *RMS Ref*, 4-23
- Maximum record size option, (P) *File Appl*, 4-33
- Maximum visits
definition, (S) *DECnet Mgmt*, 2-22
- MAXJOBS process limit, (S) *Sys Mgr Essentials*, 6-43
- MAXPROCESSCNT parameter, (S) *Alpha Perform*, 1-5
- MAXSYSGROUP system parameter, (S) *Security*, 4-24, C-10; (S) *Sys Mgr Essentials*, 11-8
- MAX_DUMPFILE symbol, (S) *Sys Mgr Tuning*, 15-24
- max_float boundary value, (P) *Portable Math*, A-1
- MAX_PAGEFILEn_SIZE symbol, (S) *Sys Mgr Tuning*, 15-24
- MAX_PAGEFILE symbol, (S) *Sys Mgr Tuning*, 15-24
- MAX_ prefix for AUTOGEN, (S) *Sys Mgr Tuning*, 14-20
- MAX_RECORD_NUMBER attribute, (P) *Rec Mgmt Util*, 4-19; (P) *File Appl*, 4-33

- MAX_SWAPFILEn_SIZE symbol, (S) *Sys Mgr Tuning*, 15-24
- MAX_SWAPFILE symbol, (S) *Sys Mgr Tuning*, 15-24
- MCHK symbol, (P) *VAX SDA*, SDA-18
- MCR command
in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-5, 6-30
- MEAN_DATA_LENGTH attribute, (P) *Rec Mgmt Util*, 4-5
- MEAN_INDEX_LENGTH attribute, (P) *Rec Mgmt Util*, 4-5
- Mechanism argument vectors, (P) *Concepts*, 13-28, 13-35, 13-63; (P) *Interfaces*, B-13
on Alpha systems, (P) *Concepts*, 13-37
on VAX systems, (P) *Concepts*, 13-35
- Mechanism arrays, (P) *Alpha SDA*, SDA-19; (P) *VAX SDA*, SDA-21, SDA-25
format, (P) *Concepts*, 13-37
- Mechanism entry
in argument descriptions, (P) *Interfaces*, 1-9
- mechanism_args data type, (P) *Interfaces*, B-13
- Media errors
analyzing, (S) *Sys Mgr Essentials*, 8-64
- Media initialization
access requirements, (S) *Security*, 5-20
restricting with ACLs, (S) *Security*, 8-26
- Media Management Extension
See MME
- /MEDIA_FORMAT=CD-ROM qualifier
in Mount utility, (S) *Sys Mgmt Util M-Z*, 2-24
- /MEDIA_FORMAT=[NO]COMPACTION qualifier
in Mount utility, (S) *Sys Mgmt Util M-Z*, 2-24
- /MEDIA_FORMAT qualifier
for INITIALIZE command, (G) *DCL A-M*, DCLI-254; (G) *DCL N-Z*, DCLII-171
in Backup utility, (S) *Sys Mgmt Util A-L*, 7-46
- Member numbers in UICs, (S) *Security*, 4-2
- Members
definition, (S) *VMScluster Sys*, 1-3
managing
cluster group numbers and passwords, (S) *VMScluster Sys*, 2-14
cluster security, (S) *VMScluster Sys*, 5-10
state transitions, (S) *VMScluster Sys*, 1-4
shadow set, (S) *VMScluster Sys*, 6-22
- MEMBERS class
adding, (S) *Sys Mgmt Util M-Z*, 4-30
fields belonging to, (S) *Sys Mgmt Util M-Z*, 4-25
removing, (S) *Sys Mgmt Util M-Z*, 4-46
- Memory
See also Virtual memory
adding, (S) *VAX Perform*, 5-11; (S) *Alpha Perform*, 17-10
allocating strings, (P) *STR\$, STR-43*
allocation algorithms, (P) *Concepts*, 21-7
- Memory (cont'd)
allotted to vector consumer processes, (S) *Sys Mgr Tuning*, 26-7
availability, (S) *VAX Perform*, 4-20, 4-23
classes, (S) *DECamds*, 5-10
conserving with shareable images, (S) *Sys Mgr Tuning*, 16-11
consumption patterns, (S) *VAX Perform*, 4-16, 4-19
contents of a block
formatting, (P) *VAX SDA*, SDA-60
deallocating strings, (P) *STR\$, STR-42*
default data collection, (S) *DECamds*, 5-2
displaying availability and use of
process balance slots, (G) *DCL N-Z*, DCLII-298
process entry slots, (G) *DCL N-Z*, DCLII-298
displaying error count for, (G) *DCL N-Z*, DCLII-280
distribution on a node, (S) *DECamds*, 3-14
dynamic, (P) *DECthreads*, 3-6
displaying availability and use of, (G) *DCL N-Z*, DCLII-298
dynamic pool
displaying contents, (P) *Alpha SDA*, SDA-120
error messages, (S) *DECamds*, 3-12
examining, (P) *Alpha SDA*, SDA-48
examining contents, (G) *DCL A-M*, DCLI-209
example fix for low, (S) *DECamds*, 4-6
fixes, (S) *DECamds*, 4-1
fix for low, (S) *DECamds*, 4-2
formatting, (P) *Alpha SDA*, SDA-53
fragmentation, (P) *Concepts*, 21-2
function, (S) *VAX Perform*, 3-20
images in, (S) *Sys Mgr Tuning*, 16-11
information captured in crash dump, (S) *Sys Mgr Tuning*, 15-2
physical dump, (S) *Sys Mgr Tuning*, 15-3, 15-10
selective dump, (S) *Sys Mgr Tuning*, 15-3, 15-10
investigating low memory cause, (S) *DECamds*, 4-7
limitations, analyzing, (S) *VAX Perform*, 4-23
limitations, compensating for, (S) *VAX Perform*, 5-2
limitations, disguised, (S) *VAX Perform*, 4-35
limitations, isolating, (S) *VAX Perform*, 4-4
limitations, reducing image activations, (S) *VAX Perform*, 5-2
load balancing, (S) *VAX Perform*, 3-29
locking page into, (P) *Concepts*, 19-13, 20-12; (P) *Sys Svc II*, SYS2-126
making efficient use of by installing images, (S) *Sys Mgr Tuning*, 16-8
modifying, (G) *DCL A-M*, DCLI-147

Memory (cont'd)

- multiport, (S) *Sys Mgmt Util M-Z*, 5-17
- network requirements, (S) *DECnet Mgmt*, 5-31, 5-32
- nonpaged system dynamic, (P) *File Appl*, 9-8
- offloading, (S) *VAX Perform*, 3-28
- paging, (S) *Sys Mgr Tuning*, 15-4
- physical, (S) *Alpha Perform*, 5-2
- presetting parameters, (S) *VAX Perform*, 5-11
- process identifier (PID), (S) *DECams*, 3-11
- rate display, (S) *DECams*, 2-3
- reclaiming, (S) *VAX Perform*, 3-25, 3-26
- reducing consumption, (S) *VAX Perform*, 3-27
- releasing with the FDL\$RELEASE routine, (P) *File Appl*, 4-13
- replacing contents, (G) *DCL A-M*, DCLI-147
- requirements, (S) *DECams*, 5-15
- responsiveness, evaluating, (S) *VAX Perform*, 3-23
- responsiveness, improving, (S) *VAX Perform*, 3-26
- secondary storage, (S) *Alpha Perform*, 5-2
- sections in, (S) *Sys Mgr Tuning*, 16-12
- setting for a thread's stack, (P) *DECthreads*, 2-7
- sorting data, (S) *DECams*, 5-12
- stack, (P) *DECthreads*, 3-5
- static, (P) *DECthreads*, 3-5
- swapping, (S) *Sys Mgr Tuning*, 15-4
- total for a node, (S) *DECams*, 3-14
- types of, (P) *DECthreads*, 3-5
- unlocking page from, (P) *Sys Svc II*, SYS2-403
- virtual, (S) *Alpha Perform*, 5-2
- when large sizes prevent storing a complete system dump, (S) *Sys Mgr Tuning*, 15-10

Memory allocation

- absolute program section, (P) *Linker*, 3-4
- dynamic, (P) *Concepts*, 19-7, 20-5
- for based images, (P) *Linker*, LINK-43
- for images, (P) *Linker*, 1-2
- freeing blocks and, (P) *Concepts*, 21-1
- freeing pages and, (P) *Concepts*, 21-1
- information about, in map, (P) *Linker*, 5-10
- performed by linker, (P) *Linker*, 1-2
- relocatable program section, (P) *Linker*, 3-4

Memory availability

- analyzing limits, (S) *Alpha Perform*, 13-14
- competition for, (S) *Alpha Perform*, 13-11
- recognizing when demand exceeds, (S) *Alpha Perform*, 13-14

Memory barriers

- instructions, (P) *Concepts*, 14-10

Memory cache, (P) *File Appl*, 3-15, 3-17, 3-18

Memory consumption

- by large compute-bound processes, (S) *Alpha Perform*, 13-10
- investigating, (S) *Alpha Perform*, 13-9

Memory limitations

- compensating for, (S) *Alpha Perform*, 17-1
- disguised, (S) *Alpha Perform*, 15-3
- free memory
 - analyzing, (S) *Alpha Perform*, 13-14
 - reducing image activations, (S) *Alpha Perform*, 17-1

Memory locations

- decoding, (P) *Alpha SDA*, SDA-50; (P) *VAX SDA*, SDA-57
- examining, (P) *Alpha SDA*, SDA-49, SDA-50; (P) *VAX SDA*, SDA-55, SDA-56

Memory management

See also Pool management

- advanced concepts, (S) *VAX Perform*, 2-6
- basic concepts, (S) *VAX Perform*, 2-1
- first-level trimming, (S) *Alpha Perform*, 6-12
- long waiting processes, (S) *VAX Perform*, 2-20
- mechanisms, (S) *VAX Perform*, 2-6
 - virtual balance slots, (S) *VAX Perform*, 2-18
- memory sharing, (S) *Alpha Perform*, 6-15
- paging, (S) *Alpha Perform*, 5-4
- periodically waking processes, (S) *VAX Perform*, 2-21
- physical memory, (S) *Alpha Perform*, 5-2
- policy, (S) *VAX Perform*, 2-6
 - proactive reclamation, (S) *VAX Perform*, 2-6, 2-16, 2-19, 3-25, 3-35; (S) *Alpha Perform*, 10-6, 11-7
 - reactive reclamation, (S) *VAX Perform*, 3-25; (S) *Alpha Perform*, 10-6
- primary page cache, (S) *Alpha Perform*, 5-2
- proactive reclamation, (S) *Alpha Perform*, 6-13 to 6-15
 - secondary page cache, (S) *Alpha Perform*, 5-2
- swapper trimming, (S) *Alpha Perform*, 6-11
- swapping, (S) *Alpha Perform*, 5-5, 6-12
 - types of, (S) *Alpha Perform*, 5-5
- system services, (P) *Environment*, 10-6, 10-10; (P) *Concepts*, 19-5, 20-3
- using system routines, (P) *Environment*, 10-2
- virtual memory, (S) *Alpha Perform*, 5-2; (P) *Environment*, 10-2

Memory management subsystem, (G) *SW*

Overview, 3-1

Memory modules, (G) *SW Overview*, 1-7

Memory reads and writes on Alpha systems, (P) *Concepts*, 14-5

Memory reads and writes on VAX systems, (P) *Concepts*, 14-4

Memory regions

- examining, (P) *VAX SDA*, SDA-57

Memory resident databases

- implementing as shareable image, (P) *Linker*, 1-7

- Memory resource
 - equitable sharing, (S) *Alpha Perform*, 10-7
 - evaluating responsiveness, (S) *Alpha Perform*, 10-4
 - function, (S) *Alpha Perform*, 10-1
 - improving responsiveness, (S) *Alpha Perform*, 10-7
 - load balancing, (S) *Alpha Perform*, 10-11
 - offloading, (S) *Alpha Perform*, 10-10
 - proactive reclamation, (S) *Alpha Perform*, 10-6, 10-7
 - reducing consumption, (S) *Alpha Perform*, 10-8
- Memory sharing, (S) *VAX Perform*, 3-26; (S) *Alpha Perform*, 6-15, 6-18; (P) *DECthreads*, 3-6
 - overview, (S) *VAX Perform*, 2-21
- Memory Summary window, (S) *DECcmds*, 3-10 to 3-12
- Menus, (P) *SMG\$*, 2-13
 - creating, (P) *SMG\$*, 2-13
 - creating with SMG\$ routines, (P) *Concepts*, 7-22
 - deleting, (P) *SMG\$*, 2-14
 - reading, (P) *Concepts*, 7-24
 - selecting, (P) *SMG\$*, 2-14
- MERGE (Merge utility)
 - See Merge utility
- MERGE command, (G) *User*, 11-10; (G) *DCL A-M*, DCLI-424
 - See also Sort/Merge utility (SORT/MERGE)
 - in network operations, (S) *DECnet Intro*, 2-8 /KEY qualifier, (G) *User*, 11-2, 11-11
- Merge utility (MERGE), (G) *SW Overview*, 5-11
- Merging
 - of DIFFERENCES, (G) *DCL A-M*, DCLI-156
 - queues, (G) *DCL A-M*, DCLI-46
- MESSAGE (Message utility)
 - See Message utility
- MESSAGE command, (G) *DCL A-M*, DCLI-425
- Message count
 - correcting in Mail with READ/NEW, (G) *User*, 6-15
- Message database, (P) *Environment*, 4-2
- Message files
 - setting format, (G) *DCL N-Z*, DCLII-173
- Message format
 - See Mailboxes
- Message logging
 - CONVERT/DOCUMENT command, (G) *DCL A-M*, DCLI-69
 - /MESSAGE qualifier, (P) *Alpha SDA*, SDA-124; (P) *VAX SDA*, SDA-141
 - in Mount utility, (S) *Sys Mgmt Util M-Z*, 2-25
- Messages, (S) *DECnet Mgmt*, 8-8, 8-13, 8-21, 8-22
 - Refer also to *OpenVMS System Messages: Companion Guide for Help Message Users*
- Messages (cont'd)
 - See also Broadcast messages, Help Message utility, and OPCOM messages
 - accessing online documentation using HELP /MESSAGE command, (G) *Help Msg*, 2-4
 - accessing system message data without Help Message, (G) *Help Msg*, 1-3
 - accessing system messages, (G) *Help Msg*, 1-1
 - acknowledgment, (S) *VMScluster Sys*, F-26
 - announcement, (G) *User*, 2-7
 - creating systemwide, (S) *Sys Mgr Essentials*, 5-14
 - security disadvantages, (S) *Security*, 7-23
 - auditing, (S) *Security*, 9-2
 - auditing security-relevant events, (S) *Security*, 3-18
 - broadcast
 - removing, (S) *Sys Mgr Tuning*, 20-10
 - chaining, (P) *Concepts*, 13-53
 - conventions used in system display, (G) *User*, 2-20
 - converting security message from binary to ASCII, (P) *Sys Svc I*, SYS1-321
 - copying in Mail, (G) *User*, 6-12
 - data, (S) *DECnet Mgmt*, 8-13
 - debugger, (P) *Debugger*, 1-16, 6-2
 - DECnet hardware and software errors, (S) *DECnet Intro*, 3-31
 - defining welcome, (S) *Sys Mgr Essentials*, 5-14
 - DIBOL
 - starting the DIBOL message manager, (S) *Sys Mgr Essentials*, 5-16
 - disabling last login, (S) *Security*, 7-24
 - displaying, (P) *Concepts*, 13-50
 - distributed enable, (S) *VMScluster Sys*, F-35
 - distributed trigger, (S) *VMScluster Sys*, F-35
 - during login, (G) *User*, 2-7
 - during remote file operations, (S) *DECnet Intro*, 2-9
 - enabling and disabling, (S) *Sys Mgr Tuning*, 18-17
 - error, (S) *Sys Mgr Essentials*, 2-5
 - removing, (S) *Sys Mgr Tuning*, 20-10
 - error log, (S) *Sys Mgr Tuning*, 18-6
 - exchanging, (S) *DECnet Mgmt*, 8-13, 8-19, 8-30
 - filtering sensitive information, (P) *Sys Svc I*, SYS1-321
 - format of system, (G) *Help Msg*, 1-1
 - formatting and outputting, (P) *Sys Svc II*, SYS2-188
 - HLD errors, (S) *DECnet Mgmt*, 4-17
 - indicating command line error, (G) *User*, 2-20
 - indicating execution of startup command procedures
 - site-independent, (S) *Sys Mgr Essentials*, 4-5
 - site-specific, (S) *Sys Mgr Essentials*, 4-5

Messages (cont'd)

- indicating high page or swap file fragmentation, (S) *Sys Mgr Tuning*, 15-27
- indicating insufficient page file size, (S) *Sys Mgr Tuning*, 15-9
- indicating lack of installed page file, (S) *Sys Mgr Essentials*, 5-6
- indicating successful boot, (S) *Sys Mgr Essentials*, 4-5
- indicating that a vector processor is not available, (S) *Sys Mgr Tuning*, 26-6
- indicating that login is possible, (S) *Sys Mgr Essentials*, 4-5
- informational, (G) *User*, 2-20
- interrupt, (S) *DECnet Mgmt*, 8-8, 8-30
- last successful interactive login, (S) *Security*, 3-6
- logging, (P) *Concepts*, 13-56
- login, (S) *Security*, 3-5
- login failures, (G) *User*, 2-8; (S) *Security*, 3-17
- login welcome, (S) *Sys Mgr Essentials*, 2-10
- loopback testing errors, (S) *DECnet Mgmt*, 7-7
- mailbox, (S) *DECnet Mgmt*, 8-8, 8-13
- network-related (explanations), (S) *DECnet Intro*, 4-10
- network status, (S) *DECnet Mgmt*, 8-8
- new in this release, (G) *V6.2 New Feat*, A-1
- obtaining text of, (P) *Sys Svc I*, SYS1-380
- online documentation, (G) *DCL A-M*, DCLI-239
- OPCOM, (S) *VMScluster Sys*, D-11
- operator replies, (S) *Sys Mgr Essentials*, 2-25; (S) *Sys Mgr Tuning*, 18-19
- operator requests, (S) *Sys Mgr Essentials*, 2-25
- optional user data, (S) *DECnet Mgmt*, 8-8, 8-11, 8-24
- question mark (?), (S) *Sys Mgr Essentials*, 4-16
- routing over network, (S) *DECnet Intro*, 1-2
- security alarm, (S) *Sys Mgr Tuning*, 18-21
- sending to error logger, (P) *Sys Svc II*, SYS2-304
- sending to one or more terminals, (P) *Sys Svc I*, SYS1-68, SYS1-76
- sending to operator, (P) *Sys Svc II*, SYS2-363
- sending to terminals, (G) *DCL N-Z*, DCLII-41
- sending to users with OPCOM, (S) *Sys Mgr Essentials*, 2-22
- suppressing, (G) *User*, 2-8; (S) *Security*, 3-6, 7-23
- suppressing last login, (S) *Security*, 3-17
- suppressing the display, (S) *Sys Mgr Tuning*, 14-12
- system, (P) *Interfaces*, 4-9
 - routines for global symbols, (P) *Alpha SDA*, SDA-61
- system, condition codes, (G) *Help Msg*, 1-3

Messages (cont'd)

- system, exception conditions, (G) *Help Msg*, 1-4
- system, recovery procedures, (G) *Help Msg*, 1-4
- system responses to commands, (G) *User*, 2-19
- user requests, (S) *Sys Mgr Tuning*, 18-19
- using when managing a system, (S) *Sys Mgr Essentials*, 2-5
- welcome, (S) *Security*, 3-6
- WRITEBOOT, (S) *Sys Mgr Essentials*, 4-19
- writing to terminal, (P) *Sys Svc I*, SYS1-68, SYS1-76

Messages, sending to OPCOM, (S) *DECamds*, 1-9

Message symbols, (P) *Sys Svc II*, SYS2-192

Message text

- specifying variables in, (P) *Concepts*, 13-60

Message utility (MESSAGE), (G) *SW Overview*, 4-8, 4-17; (P) *Environment*, 4-2; (P) *Concepts*, 13-56 to 13-63

- accessing message object module, (P) *Concepts*, 13-60
- associating messages with exception conditions, (P) *Concepts*, 13-57
- compiling message file, (P) *Concepts*, 13-60
- creating a message object library, (P) *Concepts*, 13-60
- .END directive, (P) *Concepts*, 13-59
- .FACILITY directive, (P) *Concepts*, 13-58
- facility name, (P) *Concepts*, 13-58
- facility number, (P) *Concepts*, 13-59
- FAO parameters, (P) *Concepts*, 13-62
- /FAO_COUNT, (P) *Concepts*, 13-60
- logging messages, (P) *Concepts*, 13-56
- message object module, (P) *Concepts*, 13-60
- message text, (P) *Concepts*, 13-59
- message text variables, (P) *Concepts*, 13-60
- modifying a message source file, (P) *Concepts*, 13-61
- .SEVERITY directive, (P) *Concepts*, 13-59
- source module, (P) *Concepts*, 13-58
- .TITLE directive, (P) *Concepts*, 13-60

MESSAGE_ROUTINES.EXE file

- global symbols, (P) *VAX SDA*, SDA-65

MESSAGE_ROUTINES.STB file

- global symbols, (P) *Alpha SDA*, SDA-61

Metrics, quality, (S) *Dependable*, 3-10

MFDs (master file directories), (G) *User*, 5-1; (S) *Sys Mgr Tuning*, A-4; (P) *File Appl*, 1-7, 6-11

See also Directory structures

- BACKUP stores save-set file in, (S) *Sys Mgr Tuning*, A-8
- contains directory structure for volume set, (S) *Sys Mgr Essentials*, 8-33
- definition, (S) *Sys Mgr Tuning*, A-8
- on root volume in volume set, (S) *Sys Mgr Essentials*, 8-31
- reserved file, (S) *Sys Mgr Tuning*, A-8

- MFDs (master file directories) (cont'd)
 - reserved files listed in, (S) *Sys Mgr Essentials*, 8-4
- MIA (Multivendor Integration Architecture)
 - DEC Rdb support for, (G) *SW Overview*, 7-15
 - NAS support for, (G) *SW Overview*, 6-10
- Microcode, (S) *DECnet Mgmt*, 1-9
- MicroVAX
 - See Workstations
- Microwave links, (S) *DECnet Intro*, 1-2, 1-7
- Migration
 - application paths, (G) *Compatibility*, 3-7
 - compiler options, (P) *Environment*, 1-5
 - documentation, (G) *Compatibility*, 3-9; (P) *Environment*, 1-5
 - software, (G) *Compatibility*, 3-8
 - tools, (P) *Environment*, 1-5
 - training, (G) *Compatibility*, 3-8
 - VEST, (P) *Environment*, 1-5
- Minimerge and volume shadowing, (S) *Sys Mgr Essentials*, 10-42
- Minimum startup
 - booting with, (S) *Sys Mgr Essentials*, 4-14
- Minor ID
 - specifying value of, (P) *Linker*, LINK-52
- MIN_DUMPFILE symbol, (S) *Sys Mgr Tuning*, 15-24
- min_float boundary value, (P) *Portable Math*, A-1
- MIN_PAGEFILEn_SIZE symbol, (S) *Sys Mgr Tuning*, 15-24
- MIN_PAGEFILE symbol, (S) *Sys Mgr Tuning*, 15-24
- MIN_ prefix for AUTOGEN, (S) *Sys Mgr Tuning*, 14-20
- MIN_SWAPFILEn_SIZE symbol, (S) *Sys Mgr Tuning*, 15-24
- MIN_SWAPFILE symbol, (S) *Sys Mgr Tuning*, 15-24
- MIRRO\$SERVER account
 - enabling default access, (S) *DECnet Mgmt*, 2-25, 5-3, 5-6
- Mirrored disks
 - See Volume shadowing
- MIRRORS (loopback mirrors), (S) *DECnet Intro*, 4-7; (S) *DECnet Mgmt*, 1-13, 2-25, 7-2; (S) *DECnet Mgmt Util*, 3-54
 - default access account, (S) *DECnet Intro*, 3-13
- MIRRO\$SERVER account
 - default access, (S) *DECnet Mgmt*, 2-25, 5-3, 5-6
- Miscellaneous (MWAIT) resource wait state, (S) *Alpha Perform*, 9-4
- Mixed I/O, (P) *RMS Ref*, A-34
- Mixed-interconnect VMScluster systems
 - changing allocation class values on HSC subsystems, (S) *VMScluster Sys*, 6-9, 8-40
 - changing allocation class values on HSJ subsystems, (S) *VMScluster Sys*, 6-10
- Mixed-interconnect VMScluster systems (cont'd)
 - HSC disks served by MSCP, (S) *VMScluster Sys*, 3-13
 - MSCP server accesses shadow sets, (S) *VMScluster Sys*, 6-24
- Mixed-language programming
 - calling conventions, (P) *Interfaces*, 2-1
- Mixing native Alpha and translated images
 - as a stage in migration, (G) *Compatibility*, 3-8
 - possibility of, (G) *Compatibility*, 3-8
- MME (Media Management Extension)
 - not in C2 evaluation, (S) *Security*, C-3
- MMG_CTLFLAGS parameter, (S) *VAX Perform*, 2-19; (S) *Alpha Perform*, 6-15
- MMS, (G) *SW Overview*, 4-9, 6-15; (P) *Environment*, 6-2
- MMS, building systems, (S) *Dependable*, 8-59
- MODE logical name, (S) *Sys Mgr Tuning*, 17-18, 17-38
- Mode menu, (S) *Sys Mgr Essentials*, 3-37
- Modems, (S) *Security*, 12-15; (S) *DECnet Intro*, 1-7, 1-12, 3-4, 3-20, 3-24; (S) *DECnet Mgmt*, 5-13, 7-6
 - autodial, (S) *DECnet Intro*, 3-26
 - null cable, (S) *DECnet Intro*, 3-19
- Modes
 - See also Execution modes, Executive mode, and Privilege mode
 - interactive, (P) *File Appl*, 10-11
 - locate performance, (P) *File Appl*, 9-9
 - SET MODE [NO]DYNAMIC command, (P) *Debugger*, 9-6, 9-13
 - SET MODE [NO]INTERRUPT command, (P) *Debugger*, 14-6
 - SET MODE [NO]KEYPAD command, (P) *Debugger*, 12-8
 - SET MODE [NO]OPERANDS command, (P) *Debugger*, 8-19
 - SET MODE [NO]SCREEN command, (P) *Debugger*, 11-1
 - SET MODE [NO]SEPARATE command, (P) *Debugger*, 2-9, 13-5
 - SET MODE [NO]SYMBOLIC command, (P) *Debugger*, 8-13
- MODES class record
 - in Monitor utility, (S) *Sys Mgmt Util M-Z*, A-23
- Modes of operation, (S) *Sys Mgmt Util A-L*, 3-3
 - image, (S) *Sys Mgmt Util A-L*, 7-35
 - physical, (S) *Sys Mgmt Util A-L*, 7-49
- Mode switching
 - when permitted, (P) *RMS Ref*, A-34
- modf routine, (P) *Portable Math*, DPML-44, B-10
- Modified List Fault Rate, (S) *Alpha Perform*, 10-4
- Modified page list, (S) *Alpha Perform*, 5-2
 - displaying, (P) *VAX SDA*, SDA-131
 - evaluating, (S) *VAX Perform*, 3-24; (S) *Alpha Perform*, 10-5

- /MODIFIED qualifier, (P) *VAX SDA*, SDA-131
 - in Backup utility, (S) *Sys Mgmt Util A-L*, 7-47
- MODIFY command, (P) *Rec Mgmt Util*, 6-16; (P) *File Appl*, 10-26
 - Edit/FDL utility, (P) *File Appl*, A-1
- Modify file function, (P) *I/O User*, 1-27
- MODPARAMS.DAT file, (S) *Sys Mgr Tuning*, 14-17, 14-18
 - ADD_ prefix, (S) *Sys Mgr Tuning*, 14-19
 - controlling page, swap, and dump files, (S) *Sys Mgr Tuning*, 15-18, 15-22
 - specifying location, (S) *Sys Mgr Tuning*, 15-24
 - specifying size of individual files, (S) *Sys Mgr Tuning*, 15-24
 - specifying size of total file space, (S) *Sys Mgr Tuning*, 15-23
 - controlling parameter values set by AUTOGEN, (S) *Sys Mgr Tuning*, 14-4, 14-18
 - created by CLUSTER_CONFIG.COM, (S) *VMScluster Sys*, 8-1
 - creating page, swap, and dump files, (S) *Sys Mgr Tuning*, 15-17, 15-24
 - example, (S) *VMScluster Sys*, 6-9
 - including external parameter files in, (S) *Sys Mgr Tuning*, 14-22
 - increasing parameter values, (S) *Sys Mgr Tuning*, 14-19
 - MAX_ prefix, (S) *Sys Mgr Tuning*, 14-20
 - MIN_ prefix, (S) *Sys Mgr Tuning*, 14-20
 - sample, (S) *Sys Mgr Tuning*, 14-17
 - specifying an alternate default startup command, (S) *Sys Mgr Essentials*, 4-13
 - specifying dump file, (S) *VMScluster Sys*, 10-13
 - specifying MSCP disk-serving parameters, (S) *VMScluster Sys*, 6-15
 - specifying parameter values
 - absolute, (S) *Sys Mgr Tuning*, 14-20
 - maximum, (S) *Sys Mgr Tuning*, 14-20
 - minimum, (S) *Sys Mgr Tuning*, 14-20
 - specifying TMSCP tape-serving parameters, (S) *VMScluster Sys*, 6-15
 - storing your system parameter changes in, (S) *Sys Mgr Tuning*, 14-5
 - updating, (S) *VMScluster Sys*, 8-36
- Modularity
 - virtual displays, (P) *Concepts*, 7-30
- Module header records
 - analyzing in object files, (G) *DCL A-M*, DCLI-27
- Module Management System
 - See MMS
- Module objects
 - analyzing, (G) *DCL A-M*, DCLI-25
 - analyzing end-of-file records, (G) *DCL A-M*, DCLI-26
- Modules, (S) *DECnet Mgmt*, 1-17; (P) *Debugger*, 3-2, 5-5
 - See also Shareable images
 - canceling, (P) *Debugger*, 9-6
 - database, (S) *DECnet Mgmt*, 3-1
 - Ethernet configurator, (S) *DECnet Mgmt*, 1-17, 2-11, 3-34
 - finding failing, (P) *VAX SDA*, SDA-27
 - information about, (P) *Debugger*, 9-6
 - setting, (P) *Debugger*, 9-5
 - traceback information, (P) *Debugger*, 9-3
- Module traceback records
 - analyzing in object files, (G) *DCL A-M*, DCLI-27
- MOM (maintenance operation module), (S) *DECnet Mgmt*, 4-1, 4-2
- MONITOR (Monitor utility)
 - See Monitor utility
- MONITOR.COM command procedure, (S) *Sys Mgr Tuning*, 18-40; (S) *Alpha Perform*, 7-7
 - used with Monitor utility, (S) *Sys Mgr Tuning*, 18-39
- MONITOR ALL_CLASSES command
 - in Monitor utility, (S) *Sys Mgmt Util M-Z*, 1-14
- Monitor button, (P) *Debugger*, 1-8, 3-17
- MONITOR CLUSTER command
 - in Monitor utility, (S) *Sys Mgmt Util M-Z*, 1-15
- MONITOR command, (G) *DCL A-M*, DCLI-426
 - controlling amount of time between displays of screen images, (S) *Sys Mgr Tuning*, 18-37
 - for displaying all RMS statistics screens, (P) *File Appl*, 3-32
 - in Monitor utility, (S) *Sys Mgmt Util M-Z*, 1-8
 - recording data on time spent, (S) *Sys Mgr Tuning*, 18-36
 - recording file system and process data, (S) *Sys Mgr Tuning*, 18-36
 - routing display output, (S) *Sys Mgr Tuning*, 18-35
 - specifying how log request is to run, (S) *Sys Mgr Tuning*, 18-34
 - specifying input file, (S) *Sys Mgr Tuning*, 18-36
 - specifying node, (S) *Sys Mgr Tuning*, 18-35
 - specifying time of display, (S) *Sys Mgr Tuning*, 18-36
 - storing display output, (S) *Sys Mgr Tuning*, 18-37
- MONITOR data
 - summary of most important items, (S) *VAX Perform*, 3-42
- MONITOR DECNET command, (S) *DECnet Intro*, 4-7
 - in Monitor utility, (S) *Sys Mgmt Util M-Z*, 1-19

- MONITOR DECNET data
 - kernel mode, (S) *VAX Perform*, 3-16
- MONITOR DISK command
 - in Monitor utility, (S) *Sys Mgmt Util M-Z*, 1-20
- MONITOR DISK data
 - responsiveness of disk I/O subsystem, (S) *VAX Perform*, 3-31
 - using to evaluate MSCP-served disk, (S) *VAX Perform*, 3-33
- MONITOR DLOCK command
 - in Monitor utility, (S) *Sys Mgmt Util M-Z*, 1-23
- MONITOR DLOCK data
 - interrupt stack, (S) *VAX Perform*, 3-15
- MONITOR FCP command
 - in Monitor utility, (S) *Sys Mgmt Util M-Z*, 1-25
- MONITOR FCP data
 - file system I/O activity, (S) *VAX Perform*, 3-35
- MONITOR FILE_SYSTEM_CACHE command
 - in Monitor utility, (S) *Sys Mgmt Util M-Z*, 1-26
- MONITOR FILE_SYSTEM_CACHE data
 - file system I/O activity, (S) *VAX Perform*, 3-35
 - relationship to ACP/XQP system parameters, (S) *VAX Perform*, 3-36
- Monitoring procedures, (P) *Modular Proc*, A-4
- Monitoring RMS performance
 - using RMS statistics, (P) *File Appl*, 3-29
- MONITOR IO command
 - in Monitor utility, (S) *Sys Mgmt Util M-Z*, 1-30
- MONITOR IO data
 - kernel mode, (S) *VAX Perform*, 3-16
 - swapping and swapper trimming, (S) *VAX Perform*, 3-25
- MONITOR LOCK command
 - in Monitor utility, (S) *Sys Mgmt Util M-Z*, 1-32
- MONITOR LOCK data
 - kernel mode, (S) *VAX Perform*, 3-16
 - voluntary wait states, (S) *VAX Perform*, 3-11
- MONITOR MODES command
 - in Monitor utility, (S) *Sys Mgmt Util M-Z*, 1-33
- MONITOR MODES data
 - compatibility mode, (S) *VAX Perform*, 3-15
 - CPU consumption, (S) *VAX Perform*, 3-14
 - CPU load balancing in a VAXcluster, (S) *VAX Perform*, 3-19
 - executive mode, (S) *VAX Perform*, 3-14, 3-18
 - idle time, (S) *VAX Perform*, 3-15
 - available CPU capacity, (S) *VAX Perform*, 3-11
 - interpreting, (S) *VAX Perform*, 3-15
 - interrupt stack, (S) *VAX Perform*, 3-14, 3-15
 - kernel mode, (S) *VAX Perform*, 3-14, 3-16
- MONITOR MODES data (cont'd)
 - MP synchronization, (S) *VAX Perform*, 3-14, 3-16
 - supervisor mode, (S) *VAX Perform*, 3-15
 - user mode, (S) *VAX Perform*, 3-15
- MONITOR MSCP_SERVER command
 - in Monitor utility, (S) *Sys Mgmt Util M-Z*, 1-36
- MONITOR PAGE command
 - in Monitor utility, (S) *Sys Mgmt Util M-Z*, 1-38
- MONITOR PAGE data
 - disk I/O consumption, (S) *VAX Perform*, 3-34
 - kernel mode, (S) *VAX Perform*, 3-16
 - memory consumption, (S) *VAX Perform*, 3-27
 - page faulting, (S) *VAX Perform*, 3-23
- MONITOR POOL command, (G) *Compatibility*, 1-5
 - not provided, (S) *Comparison*, B-2
- MONITOR PROCESSES command
 - displays Alpha CPU-specific page values, (S) *Comparison*, 5-9
 - in Monitor utility, (S) *Sys Mgmt Util M-Z*, 1-40
- MONITOR PROCESSES data
 - involuntary wait states, (S) *VAX Perform*, 3-12
- MONITOR RMS command
 - in Monitor utility, (S) *Sys Mgmt Util M-Z*, 1-43
- MONITOR SCS command
 - in Monitor utility, (S) *Sys Mgmt Util M-Z*, 1-46
- MONITOR SCS data
 - interrupt stack, (S) *VAX Perform*, 3-15
- MONITOR STATES command
 - in Monitor utility, (S) *Sys Mgmt Util M-Z*, 1-49
- MONITOR STATES data
 - available CPU capacity, (S) *VAX Perform*, 3-11
 - compute queue, (S) *VAX Perform*, 3-9
 - involuntary wait states, (S) *VAX Perform*, 3-12
 - secondary page cache, (S) *VAX Perform*, 3-24
 - swapping and swapper trimming, (S) *VAX Perform*, 3-25
 - voluntary wait states, (S) *VAX Perform*, 3-11
- MONITOR SYSTEM command
 - in Monitor utility, (S) *Sys Mgmt Util M-Z*, 1-52
- MONITOR TRANSACTION command
 - in Monitor utility, (S) *Sys Mgmt Util M-Z*, 1-55
- Monitor utility (MONITOR), (G) *SW Overview*, 3-10; (G) *Compatibility*, 2-9; (S) *Sys Mgmt Util M-Z*, 1-3; (S) *Alpha Perform*, 7-1; (S) *VMScluster Sys*, 1-10
 - analyzing disk use with, (S) *Sys Mgr Essentials*, 8-8

Monitor utility (MONITOR) (cont'd)

analyzing RMS cache statistics display, (*P*) *File Appl*, 3-31

class-name qualifiers

/ALL, (*S*) *Sys Mgmt Util M-Z*, 1-14
/AVERAGE, (*S*) *Sys Mgmt Util M-Z*, 1-14
/CPU, (*S*) *Sys Mgmt Util M-Z*, 1-34
/CURRENT, (*S*) *Sys Mgmt Util M-Z*, 1-14
/ITEM, (*S*) *Sys Mgmt Util M-Z*, 1-21, 1-47
/MAXIMUM, (*S*) *Sys Mgmt Util M-Z*, 1-14
/MINIMUM, (*S*) *Sys Mgmt Util M-Z*, 1-14
/PERCENT, (*S*) *Sys Mgmt Util M-Z*, 1-21
/TOPBIO, (*S*) *Sys Mgmt Util M-Z*, 1-40
/TOPCPU, (*S*) *Sys Mgmt Util M-Z*, 1-40
/TOPDIO, (*S*) *Sys Mgmt Util M-Z*, 1-40
/TOPFAULT, (*S*) *Sys Mgmt Util M-Z*, 1-40
/TOPRBS, (*S*) *Sys Mgmt Util M-Z*, 1-41

class types, (*S*) *Sys Mgr Tuning*, 18-31

collection interval, (*S*) *Sys Mgmt Util M-Z*, 1-11

command procedures, (*S*) *Sys Mgr Tuning*, 18-39

for cluster summaries, (*S*) *Sys Mgr Tuning*, 18-40

to initiate continuous recording, (*S*) *Sys Mgr Tuning*, 18-41

to produce cluster summaries, (*S*) *Sys Mgr Tuning*, 18-42

command qualifiers, (*S*) *Sys Mgmt Util M-Z*, 1-9 to 1-14

commands, (*S*) *Sys Mgmt Util M-Z*, 1-5 to 1-61

CONVERT, (*S*) *Sys Mgmt Util M-Z*, 1-5

EXECUTE, (*S*) *Sys Mgmt Util M-Z*, 1-6

EXIT, (*S*) *Sys Mgmt Util M-Z*, 1-7

HELP, (*S*) *Sys Mgmt Util M-Z*, 1-7

INITIALIZE, (*S*) *Sys Mgmt Util M-Z*, 1-8

MONITOR, (*S*) *Sys Mgmt Util M-Z*, 1-8

MONITOR ALL_CLASSES, (*S*) *Sys Mgmt Util M-Z*, 1-14

MONITOR CLUSTER, (*S*) *Sys Mgmt Util M-Z*, 1-15

MONITOR DECNET, (*S*) *Sys Mgmt Util M-Z*, 1-19

MONITOR DISK, (*S*) *Sys Mgmt Util M-Z*, 1-20

MONITOR DLOCK, (*S*) *Sys Mgmt Util M-Z*, 1-23

MONITOR FCP, (*S*) *Sys Mgmt Util M-Z*, 1-25

MONITOR FILE_SYSTEM_CACHE, (*S*) *Sys Mgmt Util M-Z*, 1-26

MONITOR IO, (*S*) *Sys Mgmt Util M-Z*, 1-30

MONITOR LOCK, (*S*) *Sys Mgmt Util M-Z*, 1-32

MONITOR MODES, (*S*) *Sys Mgmt Util M-Z*, 1-33

Monitor utility (MONITOR)

commands (cont'd)

MONITOR MSCP_SERVER, (*S*) *Sys Mgmt Util M-Z*, 1-36

MONITOR PAGE, (*S*) *Sys Mgmt Util M-Z*, 1-38

MONITOR PROCESSES, (*S*) *Sys Mgmt Util M-Z*, 1-40

MONITOR RMS, (*S*) *Sys Mgmt Util M-Z*, 1-43

MONITOR SCS, (*S*) *Sys Mgmt Util M-Z*, 1-46

MONITOR STATES, (*S*) *Sys Mgmt Util M-Z*, 1-49

MONITOR SYSTEM, (*S*) *Sys Mgmt Util M-Z*, 1-52

MONITOR TRANSACTION, (*S*) *Sys Mgmt Util M-Z*, 1-55

SET DEFAULT, (*S*) *Sys Mgmt Util M-Z*, 1-60

SHOW DEFAULT, (*S*) *Sys Mgmt Util M-Z*, 1-61

data items

summary, (*S*) *Alpha Perform*, B-1

description, (*S*) *Sys Mgr Tuning*, 18-31

direct I/O, (*S*) *Alpha Perform*, 11-5

directing display, (*S*) *Sys Mgr Tuning*, 18-33

directing output, (*S*) *Sys Mgmt Util M-Z*, 1-4

displaying and recording concurrently, (*S*) *Sys Mgr Tuning*, 18-36

displaying live monitoring, (*S*) *Sys Mgr Tuning*, 18-34

displaying network information, (*S*) *Sys Mgr Tuning*, 21-17

entering commands, (*S*) *Sys Mgr Tuning*, 18-34

exiting, (*S*) *Sys Mgmt Util M-Z*, 1-4

exiting from, (*S*) *Sys Mgr Tuning*, 18-34

for sampling RMS statistics, (*P*) *File Appl*, 3-30

invoking, (*S*) *Sys Mgr Tuning*, 18-33; (*S*) *Sys Mgmt Util M-Z*, 1-4

live mode, (*S*) *Alpha Perform*, 7-8, 11-6

logical name for, (*S*) *Sys Mgr Essentials*, 5-8

modes, (*S*) *Alpha Perform*, 7-7

MONITOR.COM command procedure

using to create summary file, (*S*) *Sys Mgr Tuning*, 18-39

MONITOR DECNET data

kernel mode, (*S*) *Alpha Perform*, 9-8

MONITOR DISK data

evaluating MSCP served disk, (*S*) *Alpha Perform*, 11-5

responsiveness of disk I/O subsystem, (*S*) *Alpha Perform*, 11-3

MONITOR DLOCK data

interrupt state, (*S*) *Alpha Perform*, 9-8

MONITOR FCP data

Monitor utility (MONITOR)

MONITOR FCP data (cont'd)

file system I/O activity, (S) *Alpha Perform*, 11-7

MONITOR FILE_SYSTEM_CACHE data, (S)

Alpha Perform, 11-8

file system I/O activity, (S) *Alpha Perform*, 11-7

MONITOR IO data

kernel mode, (S) *Alpha Perform*, 9-8

swapping and swapper trimming, (S) *Alpha Perform*, 10-6

MONITOR LOCK data

kernel mode, (S) *Alpha Perform*, 9-8

MONITOR MODES data, (S) *Alpha Perform*, 9-7 to 9-9

CPU load balancing in a VMScluster, (S) *Alpha Perform*, 9-11

MONITOR PAGE data

disk I/O consumption, (S) *Alpha Perform*, 11-6

kernel mode, (S) *Alpha Perform*, 9-8

memory consumption, (S) *Alpha Perform*, 10-8

page fault, (S) *Alpha Perform*, 10-4

MONITOR POOL data

memory consumption, (S) *Alpha Perform*, 10-8

MONITOR SCS data

interrupt state, (S) *Alpha Perform*, 9-8

MONITOR STATES data

secondary page cache, (S) *Alpha Perform*, 10-5

swapping and swapper trimming, (S) *Alpha Perform*, 10-6

MONSUM.COM command procedure

using to generate clusterwide multifile

summary reports, (S) *Sys Mgr Tuning*, 18-39

moving log file to reduce system disk I/O, (S) *Sys Mgr Tuning*, 16-8

multifile reports, (S) *Alpha Perform*, 7-7

output

types of, (S) *Alpha Perform*, 7-7

parameters, (S) *Sys Mgr Tuning*, 18-31

playback mode, (S) *Alpha Perform*, 9-6, 11-5

playing back monitoring, (S) *Sys Mgr Tuning*, 18-37

playing back remote monitoring, (S) *Sys Mgr Tuning*, 18-38

producing reports, (S) *Sys Mgr Tuning*, 18-39

qualifiers, (S) *Sys Mgr Tuning*, 18-33

recording file record formats, (S) *Sys Mgmt Util M-Z*, A-1 to A-13

recording live monitoring, (S) *Sys Mgr Tuning*, 18-35

record types, (S) *Sys Mgmt Util M-Z*, A-2

Monitor utility (MONITOR) (cont'd)

relationship of qualifier and event, (S) *Sys Mgmt Util M-Z*, 1-12

reports, (S) *Sys Mgr Tuning*, 18-40

rerecording monitoring, (S) *Sys Mgr Tuning*, 18-39

running continuously, (S) *Sys Mgr Tuning*, 18-39

SUBMON.COM procedure

using to start MONITOR.COM as a

detached process, (S) *Sys Mgr Tuning*, 18-39

summary reports, (S) *VAX Perform*, 3-6; (S) *Alpha Perform*, 7-7

use in network analysis, (S) *DECnet Intro*, 4-7

use of VPM object in VMSclusters, (S) *DECnet Mgmt*, 5-5

version compatibility, (S) *Sys Mgr Tuning*, 18-43

MONITOR VECTOR command, (S) *Sys Mgmt Util M-Z*, 1-58

Monitor View, (P) *Debugger*, 1-8, 3-17

MONITOR_SERVER process

log file, (S) *Sys Mgmt Util M-Z*, 1-17

network startup, (S) *Sys Mgmt Util M-Z*, 1-17

startup time, (S) *Sys Mgmt Util M-Z*, 1-18

MONSUM.COM command procedure, (S) *Sys Mgr Tuning*, 18-42; (S) *Alpha Perform*, 7-7

used with Monitor utility, (S) *Sys Mgr Tuning*, 18-39

using to generate clusterwide multifile

summary reports, (S) *Sys Mgr Tuning*, 18-39

MOP (maintenance operation protocol), (S)

DECnet Mgmt, 4-1, 4-11

downline loading, (S) *Sys Mgr Tuning*, 23-2

error recovery, (S) *DECnet Mgmt*, 4-5

request memory dump message, (S) *DECnet Mgmt*, 4-11

MOP downline load service

clearing counters, (G) *V6.2 New Feat*, 6-22;

(S) *Sys Mgr Tuning*, 22-25; (S) *Sys Mgmt Util A-L*, 12-9

console carrier, (G) *V6.2 New Feat*, 6-24; (S) *Sys Mgr Tuning*, 22-26; (S) *Sys Mgmt Util A-L*, 12-10

disabling, (G) *V6.2 New Feat*, 6-17; (S) *Sys Mgr Tuning*, 22-23

displaying status and counters, (G) *V6.2 New Feat*, 6-21, 6-22; (S) *Sys Mgr Tuning*, 22-23, 22-24; (S) *Sys Mgmt Util A-L*, 12-18, 12-37

enabling, (G) *V6.2 New Feat*, 6-17; (S) *Sys Mgr Tuning*, 22-23

LANACP server, (G) *V6.2 New Feat*, 6-21; (S) *Sys Mgr Tuning*, 22-23

LAN MOP, (G) *V6.2 New Feat*, 6-27; (S) *Sys Mgr Tuning*, 22-20

MOP downline load service

LAN MOP (cont'd)

coexisting with DECnet MOP, (G) *V6.2 New Feat*, 6-28; (S) *Sys Mgr Tuning*, 22-20

migrating DECnet MOP to LAN MOP, (G) *V6.2 New Feat*, 6-28; (S) *Sys Mgr Tuning*, 22-20

sample setup, (G) *V6.2 New Feat*, 6-29; (S) *Sys Mgr Tuning*, 22-22

setup with CLUSTER_CONFIG.COM, (G) *V6.2 New Feat*, 6-29; (S) *Sys Mgr Tuning*, 22-21

trigger boot, (G) *V6.2 New Feat*, 6-25; (S) *Sys Mgr Tuning*, 22-27; (S) *Sys Mgmt Util A-L*, 12-40

MOP servers

and satellite booting, (S) *VMScluster Sys*, 3-7

enabling, (S) *VMScluster Sys*, 9-9

functions, (S) *VMScluster Sys*, 3-6

selecting, (S) *VMScluster Sys*, 8-4

for availability, (S) *VMScluster Sys*, 3-17

Mosaic, (S) *TCP/IP*, 3-5

Motif

See DECwindows Motif software

MOUNT (Mount utility)

See Mount utility

MOUNT command, (G) *User*, 12-6, 12-9; (G)

DCL A-M, DCLI-427; (P) *I/O User*, 3-22

adding to volume sets, (S) *Sys Mgr Essentials*, 8-22

assigning a volume set name, (S) *Sys Mgr Essentials*, 8-31

avoiding use of /CLUSTER with SYSMAN DO command, (S) *Sys Mgr Tuning*, 20-21; (S) *Sys Mgmt Util M-Z*, 6-31

/BLOCKSIZE qualifier, (P) *File Appl*, 1-30

creating a public volume, (S) *Sys Mgr Essentials*, 8-24

creating disk volume sets, (S) *Sys Mgr Essentials*, 8-30

creating volume sets, (S) *Sys Mgr Essentials*, 8-22

disabling automatic volume switching, (S) *Sys Mgr Essentials*, 8-40

disk and tape volumes, (S) *Sys Mgr Essentials*, 8-20

enabling and disabling, (S) *Sys Mgr Essentials*, 8-23, 8-24

enabling the processing of subsystem ACEs, (S) *Sys Mgr Essentials*, 8-23

foreign volumes, (S) *Sys Mgr Essentials*, 8-22

for foreign volumes, (S) *Sys Mgr Essentials*, 8-24, 9-13

format, (G) *User*, 12-6

inhibiting access checks, (S) *Sys Mgr Essentials*, 8-25

in system startup

MOUNT command

in system startup (cont'd)

for remote InfoServer devices, (S) *Sys Mgr Tuning*, 23-14

mounting page and swap file disks, (S) *Sys Mgr Essentials*, 5-6

special consideration about operator assistance, (S) *Sys Mgr Essentials*, 5-11

ISO 9660 media, (S) *Sys Mgr Essentials*, 8-23

overriding expiration date, (S) *Sys Mgr Essentials*, 9-14

overriding protection, (S) *Sys Mgr Essentials*, 8-25

overriding protection checks, (S) *Sys Mgr Essentials*, 8-23

parameters, (S) *Sys Mgr Essentials*, 8-21

protection codes, (S) *Sys Mgr Essentials*, 9-12

public volumes, (S) *Sys Mgr Essentials*, 8-21

qualifiers, (S) *Sys Mgr Essentials*, 8-22, 8-24

/RECORDSIZE qualifier, (P) *File Appl*, 1-31

specifying UIC, (S) *Sys Mgr Essentials*, 8-25

suspending quota operation on a volume, (S) *Sys Mgr Essentials*, 8-52

tape, (S) *Sys Mgr Essentials*, 9-21

to mount disk holding page and swap files, (S) *Sys Mgr Tuning*, 15-20

window size and, (P) *File Appl*, 9-8

Mounted forms

matching stock, (S) *Sys Mgr Essentials*, 13-42

Mount error message, (S) *Sys Mgmt Util A-L*, 7-56

Mount function, (P) *I/O User*, 1-32

Mounting disks, (S) *VMScluster Sys*, 6-19, 6-20

Mounting forms, (S) *Sys Mgr Essentials*, 13-64

Mounting of queue database disk, (S) *Sys Mgr Essentials*, 12-6

Mounting tapes, (G) *User*, 12-7, 12-8

Mounting volumes

access requirements, (S) *Security*, 5-20

and security audit, (G) *User*, 19-11

disks

for queue database files, (S) *Sys Mgr Essentials*, 12-6

in system startup

InfoServer, (S) *Sys Mgr Tuning*, 23-14

virtual device unit, (S) *Sys Mgr Tuning*, 23-14

foreign, (G) *User*, 12-7

magnetic tape, (G) *User*, 12-7, 12-8

operator assistance, (S) *Sys Mgr Essentials*, 8-18

security audits and, (S) *Security*, 3-19

with protected subsystems, (S) *Security*, 13-5

Mounting volume sets

tape

with automatic volume switching disabled, (S) *Sys Mgr Essentials*, 8-40

Mount messages

disabling with SUBSYSTEM qualifier, (S) *Sys Mgr Essentials*, 8-23

MOUNT/NOREBUILD command, (S) *VMScluster Sys*, 6-20

MOUNT privilege, (S) *Security*, A-9; (P) *Concepts*, 9-4

Mount requests, (G) *User*, 12-6

Mount utility (MOUNT), (G) *SW Overview*, 3-19; (S) *VMScluster Sys*, 1-11

directing output, (S) *Sys Mgmt Util M-Z*, 2-6
examples, (S) *Sys Mgmt Util M-Z*, 2-41 to 2-44

allocating file window mapping pointers, (S) *Sys Mgmt Util M-Z*, 2-39

creating a volume set, (S) *Sys Mgmt Util M-Z*, 2-11

disabling automatic rebuild, (S) *Sys Mgmt Util M-Z*, 2-33

enabling access to subsystems, (S) *Sys Mgmt Util M-Z*, 2-35

making a volume public, (S) *Sys Mgmt Util M-Z*, 2-36

mounting an ANSI-labeled magnetic tape, (S) *Sys Mgmt Util M-Z*, 2-21, 2-23

mounting a volume clusterwide, (S) *Sys Mgmt Util M-Z*, 2-14

overriding volume protection checks, (S) *Sys Mgmt Util M-Z*, 2-29

rebuilding a disk volume, (S) *Sys Mgmt Util M-Z*, 2-33

requesting operator assistance, (S) *Sys Mgmt Util M-Z*, 2-9, 2-41

specifying a protection code, (S) *Sys Mgmt Util M-Z*, 2-31

specifying a shareable volume, (S) *Sys Mgmt Util M-Z*, 2-35

specifying block size for magnetic tape, (S) *Sys Mgmt Util M-Z*, 2-12

specifying default block extent, (S) *Sys Mgmt Util M-Z*, 2-20

specifying magnetic tape density, (S) *Sys Mgmt Util M-Z*, 2-19

specifying magnetic tape record size, (S) *Sys Mgmt Util M-Z*, 2-34

specifying number of directories, (S) *Sys Mgmt Util M-Z*, 2-8

exiting, (S) *Sys Mgmt Util M-Z*, 2-6

invoking, (S) *Sys Mgmt Util M-Z*, 2-6

multiple foreign tape volumes, (S) *Sys Mgmt Util M-Z*, 2-26

overriding volume protection checks, (S) *Sys Mgmt Util M-Z*, 2-27

parameters, (S) *Sys Mgmt Util M-Z*, 2-4

qualifiers, (S) *Sys Mgmt Util M-Z*, 2-8 to 2-40

/ACCESSED, (S) *Sys Mgmt Util M-Z*, 2-8

/ASSIST, (S) *Sys Mgmt Util M-Z*, 2-8

Mount utility (MOUNT)

qualifiers (cont'd)

/AUTOMATIC, (S) *Sys Mgmt Util M-Z*, 2-9

/BIND, (S) *Sys Mgmt Util M-Z*, 2-10

/BLOCKSIZE, (S) *Sys Mgmt Util M-Z*, 2-11

/CACHE, (S) *Sys Mgmt Util M-Z*, 2-12

/CLUSTER, (S) *Sys Mgmt Util M-Z*, 2-14

/COMMENT, (S) *Sys Mgmt Util M-Z*, 2-15

/CONFIRM, (S) *Sys Mgmt Util M-Z*, 2-16

/COPY, (S) *Sys Mgmt Util M-Z*, 2-17

/DATA_CHECK, (S) *Sys Mgmt Util M-Z*, 2-18

/DENSITY, (S) *Sys Mgmt Util M-Z*, 2-19

/EXTENSION, (S) *Sys Mgmt Util M-Z*, 2-19

/FOREIGN, (S) *Sys Mgmt Util M-Z*, 2-20

/GROUP, (S) *Sys Mgmt Util M-Z*, 2-21

/HDR3, (S) *Sys Mgmt Util M-Z*, 2-21

/INCLUDE, (S) *Sys Mgmt Util M-Z*, 2-22

/INITIALIZE=CONTINUATION, (S) *Sys Mgmt Util M-Z*, 2-23

/LABEL, (S) *Sys Mgmt Util M-Z*, 2-23

/MEDIA_FORMAT=CD-ROM, (S) *Sys Mgmt Util M-Z*, 2-24

/MEDIA_FORMAT=[NO]COMPACTION, (S) *Sys Mgmt Util M-Z*, 2-24

/MESSAGE, (S) *Sys Mgmt Util M-Z*, 2-25

/MOUNT_VERIFICATION, (S) *Sys Mgmt Util M-Z*, 2-26

/MULTI_VOLUME, (S) *Sys Mgmt Util M-Z*, 2-26

/OVERRIDE, (S) *Sys Mgmt Util M-Z*, 2-27

/OWNER_UIC, (S) *Sys Mgmt Util M-Z*, 2-29

/PROCESSOR, (S) *Sys Mgmt Util M-Z*, 2-30

/PROTECTION, (S) *Sys Mgmt Util M-Z*, 2-31

/QUOTA, (S) *Sys Mgmt Util M-Z*, 2-32

/REBUILD, (S) *Sys Mgmt Util M-Z*, 2-32

/RECORDSIZE, (S) *Sys Mgmt Util M-Z*, 2-33

/SHADOW, (S) *Sys Mgmt Util M-Z*, 2-34

/SHARE, (S) *Sys Mgmt Util M-Z*, 2-35

/SUBSYSTEM, (S) *Sys Mgmt Util M-Z*, 2-35

/SYSTEM, (S) *Sys Mgmt Util M-Z*, 2-36

/UCS_SEQUENCE=(ESCAPE_SEQUENCE), (S) *Sys Mgmt Util M-Z*, 2-36

/UNDEFINED_FAT, (S) *Sys Mgmt Util M-Z*, 2-37

/UNLOAD, (S) *Sys Mgmt Util M-Z*, 2-38

/WINDOWS, (S) *Sys Mgmt Util M-Z*, 2-39

/WRITE, (S) *Sys Mgmt Util M-Z*, 2-39

- Mount utility (MOUNT) (cont'd)
 - requesting an ancillary control process (ACP), (S) *Sys Mgmt Util M-Z*, 2-30
 - restrictions, (S) *Sys Mgmt Util M-Z*, 2-6
 - specifying a user identification code (UIC), (S) *Sys Mgmt Util M-Z*, 2-29
 - specifying write protection, (S) *Sys Mgmt Util M-Z*, 2-39
 - using to mount ISO 9660 volume sets, (S) *Sys Mgr Essentials*, 8-34
- Mount verification, (S) *Sys Mgr Essentials*, 8-58
 - aborted
 - OPCOM message, (S) *Sys Mgr Essentials*, 8-63
 - aborting by dismounting, (S) *Sys Mgr Essentials*, 8-62
 - canceling, (S) *Sys Mgr Essentials*, 8-62, 8-63
 - definition, (S) *Sys Mgr Essentials*, 8-58
 - device off line, (S) *Sys Mgr Essentials*, 8-59, 8-61
 - device write-locked, (S) *Sys Mgr Essentials*, 8-61
 - enabling, (S) *Sys Mgr Essentials*, 8-60
 - enabling and disabling, (S) *Sys Mgr Essentials*, 8-23
 - for tapes, (S) *Sys Mgr Essentials*, 8-24
 - messages, (S) *Sys Mgr Essentials*, 8-60
 - monitoring failed devices, (S) *Dependable*, 9-11
 - operation of, (S) *Sys Mgr Essentials*, 8-59
 - timeout, (S) *Sys Mgr Essentials*, 8-60
 - OPCOM message, (S) *Sys Mgr Essentials*, 8-60
- /MOUNT_VERIFICATION qualifier
 - in Mount utility, (S) *Sys Mgmt Util M-Z*, 2-26
- Mouse, (G) *SW Overview*, 5-5
 - obtaining data with, (P) *SMG\$*, 3-1
- Mouse buttons
 - See MB1 and MB3
- MOVE command, (P) *Debugger*, 11-13
 - in Mail, (G) *User*, 6-12
 - in Show Cluster utility, (S) *Sys Mgmt Util M-Z*, 4-37
- Movefile
 - controlling whether movefile operations are enabled, (G) *DCL N-Z*, DCLII-146
 - determining if movefile operations are enabled, (G) *DCL A-M*, DCLI-319
- Movefile subfunction, (S) *Dependable*, 9-17
 - calling, (P) *I/O User*, 1-18, 1-29
 - description, (P) *I/O User*, 1-29
 - supported on Alpha and VAX systems, (S) *Comparison*, 3-3
- MOVE keypad function, (S) *Sys Mgr Tuning*, 20-7; (S) *Sys Mgmt Util M-Z*, B-3
- Moving jobs from one queue to another, (S) *Sys Mgr Essentials*, 13-57
- MP synchronization mode, (S) *Alpha Perform*, 9-7, 9-8
- MPW_LOLIMIT parameter, (S) *Alpha Perform*, 13-3
- MPW_THRESH parameter, (S) *Alpha Perform*, 13-3
- MSCP (mass storage control protocol)
 - supported devices, (P) *I/O User*, 7-2
- MSCP command
 - in SYSGEN, (S) *Sys Mgmt Util M-Z*, 5-14
- MSCP dynamic load balancing, (G) *Compatibility*, 1-8
- MSCP-served disks
 - using MONITOR DISK data to evaluate, (S) *VAX Perform*, 3-33
- MSCP servers, (S) *Sys Mgr Tuning*, 20-2; (S) *Alpha Perform*, 9-7; (S) *VMScluster Sys*, 1-4, 2-17
 - access to shadow sets, (S) *VMScluster Sys*, 6-24
 - base address, (P) *VAX SDA*, SDA-18
 - boot server, (S) *VMScluster Sys*, 3-7
 - cluster-accessible disks, (S) *VMScluster Sys*, 6-15
 - cluster-accessible files, (S) *VMScluster Sys*, 6-1
 - definition, (S) *Alpha Perform*, 11-5
 - functions, (S) *VMScluster Sys*, 6-15
 - LAN disk server, (S) *VMScluster Sys*, 3-6
 - load balancing, (S) *VMScluster Sys*, 6-17
 - loading, (S) *Sys Mgmt Util M-Z*, 5-14
 - served disks, (S) *Alpha Perform*, 11-5
 - serving a shadow set, (S) *VMScluster Sys*, 6-24
 - shared disks, (S) *VMScluster Sys*, 6-1
 - starting, (S) *Sys Mgmt Util M-Z*, 5-14
- MSCP symbol, (P) *VAX SDA*, SDA-18
- MSCP_LOAD system parameter, (S) *VMScluster Sys*, 6-15, A-2
- MSCP_SERVER class record
 - in Monitor utility, (S) *Sys Mgmt Util M-Z*, A-25
- MSCP_SERVE_ALL system parameter, (S) *VMScluster Sys*, 6-15, A-2
- MS-DOS nodes, (S) *DECnet Mgmt*, 9-20
- MSE option, (P) *Rec Mgmt Util*, 4-35
- MSGHLP
 - See Help Message utility
- .MSGHLP\$DATA files
 - adding to the Help Message database, (S) *Sys Mgr Essentials*, 5-28
 - creating, (G) *Help Msg*, 2-10
 - using to customize the Help Message database, (G) *Help Msg*, 2-8
- .MSGHLP files
 - creating, (G) *Help Msg*, 2-8
 - format of, (G) *Help Msg*, 2-9
 - using to create a .MSGHLP\$DATA file, (G) *Help Msg*, 2-11

.MSGHLP files (cont'd)

using to delete messages from the HELP
/MESSAGE database, (G) *Help Msg*, 2-11
using to modify a .MSGHLP\$DATA file, (G)
Help Msg, 2-8
MTAAPC (magnetic tape ancillary control process),
(P) *File Appl*, 1-18
MTACP (magnetic tape ancillary control process)
definition, (S) *Sys Mgr Essentials*, 8-6
MTH\$ACOSD routine, (P) *MTH\$*, MTH-6
MTH\$ACOS routine, (P) *MTH\$*, MTH-3
MTH\$AIMAG routine, (P) *MTH\$*, MTH-111
MTH\$ALOG10 routine, (P) *MTH\$*, MTH-117
MTH\$ALOG2 routine, (P) *MTH\$*, MTH-115
MTH\$ALOG routine, (P) *MTH\$*, MTH-113
MTH\$ASIND routine, (P) *MTH\$*, MTH-11
MTH\$ASIN routine, (P) *MTH\$*, MTH-9
MTH\$ATAN2 routine, (P) *MTH\$*, MTH-17
MTH\$ATAND2 routine, (P) *MTH\$*, MTH-19
MTH\$ATAND routine, (P) *MTH\$*, MTH-15
MTH\$ATANH routine, (P) *MTH\$*, MTH-21
MTH\$ATAN routine, (P) *MTH\$*, MTH-13
MTH\$CABS routine, (P) *MTH\$*, MTH-23
MTH\$CCOS routine, (P) *MTH\$*, MTH-26
MTH\$CDABS routine, (P) *MTH\$*, MTH-23
MTH\$CDCOS routine, (P) *MTH\$*, MTH-28
MTH\$CDEXP routine, (P) *MTH\$*, MTH-32
MTH\$CDLOG routine, (P) *MTH\$*, MTH-36
MTH\$CDSIN routine, (P) *MTH\$*, MTH-53
MTH\$CDSQRT routine, (P) *MTH\$*, MTH-58
MTH\$CEXP routine, (P) *MTH\$*, MTH-30
MTH\$CGABS routine, (P) *MTH\$*, MTH-23
MTH\$CGCOS routine, (P) *MTH\$*, MTH-28
MTH\$CGEXP routine, (P) *MTH\$*, MTH-32
MTH\$CGLOG routine, (P) *MTH\$*, MTH-36
MTH\$CGSIN routine, (P) *MTH\$*, MTH-53
MTH\$CGSQRT routine, (P) *MTH\$*, MTH-58
MTH\$CLOG routine, (P) *MTH\$*, MTH-34
MTH\$CMPLX routine, (P) *MTH\$*, MTH-39
MTH\$CONJG routine, (P) *MTH\$*, MTH-43
MTH\$COSD routine, (P) *MTH\$*, MTH-48
MTH\$COSH routine, (P) *MTH\$*, MTH-50
MTH\$COS routine, (P) *MTH\$*, MTH-46
MTH\$CSIN routine, (P) *MTH\$*, MTH-52
MTH\$CSQRT routine, (P) *MTH\$*, MTH-56
MTH\$CVT_DA_GA routine, (P) *MTH\$*, MTH-63
MTH\$CVT_D_G routine, (P) *MTH\$*, MTH-61
MTH\$CVT_GA_DA routine, (P) *MTH\$*, MTH-63
MTH\$CVT_G_D routine, (P) *MTH\$*, MTH-61
MTH\$DACOSD routine, (P) *MTH\$*, MTH-6
MTH\$DACOS routine, (P) *MTH\$*, MTH-3
MTH\$DASIND routine, (P) *MTH\$*, MTH-11
MTH\$DASIN routine, (P) *MTH\$*, MTH-9
MTH\$DATAN2 routine, (P) *MTH\$*, MTH-17
MTH\$DATAND2 routine, (P) *MTH\$*, MTH-19
MTH\$DATAND routine, (P) *MTH\$*, MTH-15

MTH\$DATANH routine, (P) *MTH\$*, MTH-21
MTH\$DATAN routine, (P) *MTH\$*, MTH-13
MTH\$DCMPLX routine, (P) *MTH\$*, MTH-41
MTH\$DCONJG routine, (P) *MTH\$*, MTH-44
MTH\$DCOSD routine, (P) *MTH\$*, MTH-48
MTH\$DCOSH routine, (P) *MTH\$*, MTH-50
MTH\$DCOS routine, (P) *MTH\$*, MTH-46
MTH\$DEXP routine, (P) *MTH\$*, MTH-65
MTH\$DIMAG routine, (P) *MTH\$*, MTH-111
MTH\$DLOG10 routine, (P) *MTH\$*, MTH-117
MTH\$DLOG2 routine, (P) *MTH\$*, MTH-115
MTH\$DLOG routine, (P) *MTH\$*, MTH-113
MTH\$DREAL routine, (P) *MTH\$*, MTH-121
MTH\$DSINCOSD routine, (P) *MTH\$*, MTH-128
MTH\$DSINCOS routine, (P) *MTH\$*, MTH-125
MTH\$DSIND routine, (P) *MTH\$*, MTH-131
MTH\$DSINH routine, (P) *MTH\$*, MTH-133
MTH\$DSIN routine, (P) *MTH\$*, MTH-123
MTH\$DSQRT routine, (P) *MTH\$*, MTH-136
MTH\$DTAND routine, (P) *MTH\$*, MTH-140
MTH\$DTANH routine, (P) *MTH\$*, MTH-142
MTH\$DTAN routine, (P) *MTH\$*, MTH-138
MTH\$EXP routine, (P) *MTH\$*, MTH-65
MTH\$GACOSD routine, (P) *MTH\$*, MTH-6
MTH\$GACOS routine, (P) *MTH\$*, MTH-3
MTH\$GASIND routine, (P) *MTH\$*, MTH-11
MTH\$GASIN routine, (P) *MTH\$*, MTH-9
MTH\$GATAN2 routine, (P) *MTH\$*, MTH-17
MTH\$GATAND2 routine, (P) *MTH\$*, MTH-19
MTH\$GATAND routine, (P) *MTH\$*, MTH-15
MTH\$GATANH routine, (P) *MTH\$*, MTH-21
MTH\$GATAN routine, (P) *MTH\$*, MTH-13
MTH\$GCMPLX routine, (P) *MTH\$*, MTH-41
MTH\$GCONJG routine, (P) *MTH\$*, MTH-44
MTH\$GCOSD routine, (P) *MTH\$*, MTH-48
MTH\$GCOSH routine, (P) *MTH\$*, MTH-50
MTH\$GCOS routine, (P) *MTH\$*, MTH-46
MTH\$GEXP routine, (P) *MTH\$*, MTH-65
MTH\$GIMAG routine, (P) *MTH\$*, MTH-111
MTH\$GLOG10 routine, (P) *MTH\$*, MTH-117
MTH\$GLOG2 routine, (P) *MTH\$*, MTH-115
MTH\$GLOG routine, (P) *MTH\$*, MTH-113
MTH\$GREAL routine, (P) *MTH\$*, MTH-121
MTH\$GSINCOSD routine, (P) *MTH\$*, MTH-128
MTH\$GSINCOS routine, (P) *MTH\$*, MTH-125
MTH\$GSIND routine, (P) *MTH\$*, MTH-131
MTH\$GSINH routine, (P) *MTH\$*, MTH-133
MTH\$GSIN routine, (P) *MTH\$*, MTH-123
MTH\$GSQRT routine, (P) *MTH\$*, MTH-136
MTH\$GTAND routine, (P) *MTH\$*, MTH-140
MTH\$GTANH routine, (P) *MTH\$*, MTH-142
MTH\$GTAN routine, (P) *MTH\$*, MTH-138
MTH\$HACOSD routine, (P) *MTH\$*, MTH-70
MTH\$HACOS routine, (P) *MTH\$*, MTH-68
MTH\$HASIND routine, (P) *MTH\$*, MTH-74
MTH\$HASIN routine, (P) *MTH\$*, MTH-72

- MTH\$HATAN2 routine, (P) *MTH\$*, MTH-80
- MTH\$HATAND2 routine, (P) *MTH\$*, MTH-82
- MTH\$HATAND routine, (P) *MTH\$*, MTH-78
- MTH\$HATANH routine, (P) *MTH\$*, MTH-84
- MTH\$HATAN routine, (P) *MTH\$*, MTH-76
- MTH\$HCOSD routine, (P) *MTH\$*, MTH-87
- MTH\$HCOSH routine, (P) *MTH\$*, MTH-88
- MTH\$HCOS routine, (P) *MTH\$*, MTH-86
- MTH\$HEXP routine, (P) *MTH\$*, MTH-90
- MTH\$HLOG10 routine, (P) *MTH\$*, MTH-96
- MTH\$HLOG2 routine, (P) *MTH\$*, MTH-94
- MTH\$HLOG routine, (P) *MTH\$*, MTH-92
- MTH\$HSINCOSD routine, (P) *MTH\$*, MTH-128
- MTH\$HSINCOS routine, (P) *MTH\$*, MTH-125
- MTH\$HSIND routine, (P) *MTH\$*, MTH-99
- MTH\$HSINH routine, (P) *MTH\$*, MTH-101
- MTH\$HSIN routine, (P) *MTH\$*, MTH-98
- MTH\$HSQRT routine, (P) *MTH\$*, MTH-103
- MTH\$HTAND routine, (P) *MTH\$*, MTH-107
- MTH\$HTANH routine, (P) *MTH\$*, MTH-109
- MTH\$HTAN routine, (P) *MTH\$*, MTH-105
- MTH\$RANDOM routine, (P) *MTH\$*, MTH-119
- MTH\$REAL routine, (P) *MTH\$*, MTH-121
- MTH\$ routines
- compatibility, (G) *Compatibility*, 4-12
- MTH\$SINCOSD routine, (P) *MTH\$*, MTH-128
- MTH\$SINCOS routine, (P) *MTH\$*, MTH-125
- MTH\$SIND routine, (P) *MTH\$*, MTH-131
- MTH\$SINH routine, (P) *MTH\$*, MTH-133
- MTH\$SIN routine, (P) *MTH\$*, MTH-123
- MTH\$SIN_R4 routine, (P) *Interfaces*, 3-6
- MTH\$SQRT routine, (P) *MTH\$*, MTH-136
- MTH\$TAND routine, (P) *MTH\$*, MTH-140
- MTH\$TANH routine, (P) *MTH\$*, MTH-142
- MTH\$TAN routine, (P) *MTH\$*, MTH-138
- MTH\$UMAX routine, (P) *MTH\$*, MTH-144
- MTH\$UMIN routine, (P) *MTH\$*, MTH-145
- MTH\$VxFOLRLy_MA_V5 routine, (P) *MTH\$*, MTH-198
- MTH\$VxFOLRLy_z_V2 routine, (P) *MTH\$*, MTH-202
- MTH\$VxFOLRy_MA_V15 routine, (P) *MTH\$*, MTH-190
- MTH\$VxFOLRy_z_V8 routine, (P) *MTH\$*, MTH-194
- MT_BLOCK_SIZE attribute, (P) *Rec Mgmt Util*, 4-20; (P) *File Appl*, 4-32
- MT_CLOSE_REWIND attribute, (P) *Rec Mgmt Util*, 4-20
- MT_CURRENT_POSITION attribute, (P) *Rec Mgmt Util*, 4-20
- MT_NOT_EOF attribute, (P) *Rec Mgmt Util*, 4-20
- MT_OPEN_REWIND attribute, (P) *Rec Mgmt Util*, 4-20
- MT_PROTECTION attribute, (P) *Rec Mgmt Util*, 4-21; (P) *File Appl*, 4-32
- Multiaccess circuits, (S) *DECnet Intro*, 3-2; (S) *DECnet Mgmt*, 1-4, 2-7
- Multiaccess devices, (S) *DECnet Intro*, 1-7
- Multiblock count, (S) *Alpha Perform*, 4-1
- Multiblocks, (P) *File Appl*, 3-14
- count for calculating auto extend, (P) *File Appl*, 3-5
 - count to establish global buffer size in shared sequential file operations, (P) *File Appl*, 7-21
 - definition, (P) *File Appl*, 3-10
 - option, (P) *File Appl*, 2-1
 - restriction for use, (P) *File Appl*, 3-10
- MULTIBLOCK_COUNT attribute, (P) *Rec Mgmt Util*, 4-11; (P) *File Appl*, 7-17
- Multibuffer count, (S) *Alpha Perform*, 4-1; (P) *File Appl*, 3-14, 3-27
- MULTIBUFFER_COUNT attribute, (P) *Rec Mgmt Util*, 4-12; (P) *File Appl*, 7-16 to 7-19
- Multicast addresses, (S) *DECnet Mgmt*, 1-4, 1-6, 2-3
- dump assistance, (S) *DECnet Mgmt*, 4-13
- VMScluster
- displaying, (S) *Sys Mgmt Util M-Z*, 6-17
- Multicast datagram, (S) *VMScluster Sys*, F-24
- Multicast messages, (S) *Sys Mgmt Util A-L*, 13-22, 13-42
- customizing interval, (S) *DECcmds*, B-4
 - timer for, (S) *Sys Mgmt Util A-L*, 13-30
- Multifile/multivolume configuration, (P) *File Appl*, 1-22
- Multilanguage programs
- debugging, (P) *Debugger*, 13-7
- Multimedia documents, (S) *TCP/IP*, 3-5
- linking data, (G) *SW Overview*, 5-7
 - preparation and control, (G) *SW Overview*, 5-12
- Multinational character set
- See DEC Multinational character set
- Multiple active signals, (P) *Calling Std*, 6-23
- Multiple-area networks, (S) *DECnet Intro*, 1-3; (S) *DECnet Mgmt*, 1-2
- Multiple areas, (P) *Rec Mgmt Util*, 4-6, 4-27
- Multiple areas, advantages, (P) *File Appl*, 3-24
- Multiple arguments
- delimiting in control block fields, (P) *RMS Ref*, A-5, A-6
- Multiple buffering, (S) *DECnet Mgmt Util*, 4-1
- Multiple-cause failures
- in hardware components, (S) *Dependable*, 9-12
- Multiple-environment VMScluster systems, (S) *VMScluster Sys*, 5-3
- building startup procedures, (S) *VMScluster Sys*, 5-10
 - functions that must remain specific, (S) *VMScluster Sys*, 5-8

- Multiple file specifications
 - in a parameter list, (G) *User*, 5-6
- Multiple inbound connects, (S) *DECnet Mgmt*, 8-8, 8-29, 8-38
- Multiple input files, (P) *Rec Mgmt Util*, 2-5
- Multiple-key indexed files, (P) *RMS Ref*, A-16
- Multiple OpenVMS versions (rolling upgrade), (S) *Dependable*, 9-23
- Multiple processes, (P) *SMG\$*, 4-1
- Multiple queue managers, (S) *Sys Mgr Essentials*, 12-3, 12-10
 - commands affected by, (S) *Sys Mgr Essentials*, 12-4
 - managing queues with, (S) *Sys Mgr Essentials*, 12-10
 - moving queues, (S) *Sys Mgr Essentials*, 12-10
 - restriction, (S) *Sys Mgr Essentials*, 12-3
 - specifying names of, (S) *Sys Mgr Essentials*, 12-4
 - specifying queue manager name, (S) *Sys Mgr Essentials*, 12-4, 12-10
 - use of queue database, (S) *Sys Mgr Essentials*, 12-4
- Multiple services
 - for retrieving records, (P) *File Appl*, 8-3
- Multiple-site data center
 - VMScluster systems, (S) *Dependable*, 5-11, 6-17, 7-12
- Multiple-site network, (S) *Sys Mgr Tuning*, 21-9
- Multiplexers, (P) *I/O User*, 5-1
- Multiplication
 - of complex numbers, (P) *OTS\$*, OTS-52
 - of decimal strings, (P) *STR\$*, STR-55
- Multiplication operator (*), (P) *Alpha SDA*, SDA-13; (P) *VAX SDA*, SDA-16
- Multiplying
 - vector, (P) *MTH\$*, MTH-155
- Multipoint circuits, (S) *DECnet Mgmt*, 2-8
 - polling, (S) *DECnet Mgmt*, 2-8
 - tributary, (S) *DECnet Mgmt*, 2-8
 - tributary address, (S) *DECnet Mgmt*, 2-8
- Multipoint configurations, (S) *DECnet Mgmt*, 1-3, 1-8, 5-25
- Multipoint control circuits, (S) *DECnet Mgmt*, 2-6
- Multipoint control stations, (S) *DECnet Mgmt*, 2-8
- Multipoint lines, (S) *DECnet Mgmt*, 2-12
- Multipoint tributary addresses, (S) *DECnet Mgmt*, 3-25
- Multipoint tributary circuits, (S) *DECnet Mgmt*, 2-6
- Multiprocess applications
 - synchronizing, (P) *Concepts*, 14-12
- Multiprocessing, (S) *Sys Mgr Tuning*, 26-2
 - definition, (S) *Sys Mgr Tuning*, 26-2
 - displaying information, (S) *Sys Mgr Tuning*, 26-3
- Multiprocessing (cont'd)
 - global symbols, (P) *Alpha SDA*, SDA-62; (P) *VAX SDA*, SDA-65
 - monitoring, (S) *Sys Mgr Tuning*, 26-3
 - symmetric, (G) *SW Overview*, 1-4, 3-5
 - system parameters, (S) *Sys Mgr Tuning*, 26-3
- Multiprocessing synchronization images, (S) *Comparison*, 2-18
- MULTIPROCESSING system parameter, (S) *Sys Mgr Tuning*, 26-3; (S) *Alpha Perform*, 10-10
 - on Alpha and VAX systems, (S) *Comparison*, 2-15
- Multiprocessing systems
 - showing attached processor state, (G) *DCL N-Z*, DCLII-254
 - starting attached processor, (G) *DCL N-Z*, DCLII-364
 - stopping attached processors, (G) *DCL N-Z*, DCLII-386
- Multiprocessor environment, (P) *Concepts*, 14-12
 - scheduling, (P) *Concepts*, 14-11
- Multiprocessors
 - analyzing crash dumps, (P) *Alpha SDA*, SDA-10; (P) *VAX SDA*, SDA-12
 - displaying synchronization structures, (P) *Alpha SDA*, SDA-146; (P) *VAX SDA*, SDA-170
- Multiprocess programs
 - CONNECT command, (P) *Debugger*, 14-4, 14-14
 - controlling execution, (P) *Debugger*, 14-6
 - DBG\$PROCESS logical name, (P) *Debugger*, 14-10
 - debugging, (P) *Debugger*, 14-1
 - DEFINE/PROCESS_GROUP command, (P) *Debugger*, 14-12
 - DISCONNECT command, (P) *Debugger*, 14-9
 - DO command, (P) *Debugger*, 14-5
 - EXIT command, (P) *Debugger*, 14-9, 14-10
 - global section watchpoint, (P) *Debugger*, 14-16
 - GO command, (P) *Debugger*, 14-6
 - process built-in symbols, (P) *Debugger*, 14-11
 - prompt, process-specific, (P) *Debugger*, 14-2, 14-8
 - QUIT command, (P) *Debugger*, 14-9, 14-10
 - screen mode features, (P) *Debugger*, 14-15
 - SET MODE [NO]INTERRUPT command, (P) *Debugger*, 14-7
 - SET PROCESS command, (P) *Debugger*, 14-7, 14-8
 - SET PROMPT command, (P) *Debugger*, 14-2
 - SHOW PROCESS command, (P) *Debugger*, 14-3
 - specifying processes, (P) *Debugger*, 14-11
 - STEP command, (P) *Debugger*, 14-6
 - system requirements, (P) *Debugger*, 14-17

- MULTISTREAM attribute, (P) *Rec Mgmt Util*, 4-35; (P) *File Appl*, 7-4
- Multistreamed work load, (P) *Concepts*, 14-13
- Multithreaded execution environments, (P) *Calling Std*, 3-58
- Multithreaded programming
See also Tasking (multithread) programs
introduction, (P) *DECthreads*, 1-1
potential problems, (P) *DECthreads*, 1-7, 3-7 to 3-8
software models, (P) *DECthreads*, 1-5 to 1-6
- Multivendor environments, (G) *SW Overview*, 6-2
- Multivendor Integration Architecture
See MIA
- Multivendor interoperability, (G) *SW Overview*, 2-5
- /MULTI_VOLUME qualifier
in Mount utility, (S) *Sys Mgmt Util M-Z*, 2-26
- Mutexes
comparing to condition variable, (P) *DECthreads*, 3-7
creating, (P) *DECthreads*, pthread-57, cma-50
creating attributes object, (P) *DECthreads*, pthread-52
definition of, (P) *DECthreads*, pthread-57
deleting, (P) *DECthreads*, pthread-56, cma-51
deleting attributes object, (P) *DECthreads*, pthread-53
fast, (P) *DECthreads*, pthread-55, cma-23
locking, (P) *DECthreads*, pthread-59, pthread-61, cma-52, cma-53
locking before signaling condition variable, (P) *DECthreads*, 3-9
locking global, (P) *DECthreads*, pthread-51
nonrecursive, (P) *DECthreads*, pthread-55
obtaining kind, (P) *DECthreads*, cma-16
recursive, (P) *DECthreads*, 2-9, pthread-55, cma-23
setting kind, (P) *DECthreads*, cma-23
type attribute, (P) *DECthreads*, 2-7
unlocking, (P) *DECthreads*, pthread-62, cma-54
- Mutexes held, (S) *DECamds*, 3-23
- Mutual backup processing agreements, (S) *Dependable*, 5-11
- MVS nodes, (S) *DECnet Mgmt*, 9-26
- MVTIMEOUT system parameter, (S) *Sys Mgr Essentials*, 8-60, 8-62
- MXV option, (P) *Rec Mgmt Util*, 4-20
- N**
-
- NAM\$B_BID field, (P) *RMS Ref*, 5-3
- NAM\$B_BLN field, (P) *RMS Ref*, 5-4
- NAM\$B_DEV field, (P) *RMS Ref*, 5-3, 5-4
- NAM\$B_DIR field, (P) *RMS Ref*, 5-3, 5-4
- NAM\$B_ESL field, (P) *RMS Ref*, 5-5
- NAM\$B_ESS field, (P) *RMS Ref*, 5-5
- NAM\$B_NAME field, (P) *RMS Ref*, 5-3, 5-6
- NAM\$B_NODE field, (P) *RMS Ref*, 5-3, 5-6
- NAM\$B_NOP field, (P) *RMS Ref*, 5-7
- NAM\$B_RSL field, (P) *RMS Ref*, 5-8, RMS-66
- NAM\$B_RSS field, (P) *RMS Ref*, 5-8; (P) *File Appl*, 6-8
- NAM\$B_TYPE field, (P) *RMS Ref*, 5-3, 5-8
- NAM\$B_VER field, (P) *RMS Ref*, 5-3, 5-8
- NAM\$L_DEV field, (P) *RMS Ref*, 5-3, 5-4
- NAM\$L_DIR field, (P) *RMS Ref*, 5-3, 5-4
- NAM\$L_ESA field, (P) *RMS Ref*, 5-4; (P) *File Appl*, 6-4
- NAM\$L_FNB field, (P) *RMS Ref*, 5-5, RMS-66, RMS-91
- NAM\$L_FNB status bits, (P) *RMS Ref*, 5-5
- NAM\$L_NAME field, (P) *RMS Ref*, 5-3, 5-6
- NAM\$L_NODE field, (P) *RMS Ref*, 5-3, 5-6
- NAM\$L_RLF field, (P) *RMS Ref*, 5-7; (P) *File Appl*, 6-3, 6-8, 9-7
- NAM\$L_RSA field, (P) *RMS Ref*, 5-8, RMS-66; (P) *File Appl*, 6-3, 6-8
- NAM\$L_TYPE field, (P) *RMS Ref*, 5-3, 5-8
- NAM\$L_VER field, (P) *RMS Ref*, 5-3, 5-8
- NAM\$L_WCC field, (P) *RMS Ref*, 5-9
returned by Remove service, (P) *RMS Ref*, RMS-86
- NAM\$T_DVI field, (P) *RMS Ref*, 5-4; (P) *File Appl*, 6-4
- NAM\$V bits, (P) *RMS Ref*, 5-5 to 5-6
- NAM\$V_CONCEAL field, (P) *RMS Ref*, RMS-27, RMS-66
- NAM\$V_NOCONCEAL option, (P) *RMS Ref*, 5-7, RMS-17, RMS-71
- NAM\$V_PWD field, (P) *RMS Ref*, RMS-27, RMS-66, RMS-71
- NAM\$V_PWD option, (P) *RMS Ref*, 5-7, RMS-17
- NAM\$V_SRCHXABS option, (P) *RMS Ref*, 5-7
- NAM\$V_SYNCHK option, (P) *RMS Ref*, 5-7, RMS-71
use with Parse service, (P) *RMS Ref*, 4-7
using for Parse service without I/O, (P) *RMS Ref*, RMS-70
- NAM\$W_DID field, (P) *RMS Ref*, 5-4; (P) *File Appl*, 6-4
- NAM\$W_FID field, (P) *RMS Ref*, 5-5; (P) *File Appl*, 6-4
- \$NAMDEF macro, (P) *File Appl*, 5-10
- NAME= option, (P) *Linker*, LINK-58
- NAME attribute, (P) *Rec Mgmt Util*, 4-18, 4-21, 4-27
- Name blocks
See NAMs

- %NAME built-in symbol, (P) *Debugger*, B-5
 - Name Hidden attribute, (S) *Security*, 8-9; (S) *Sys Mgmt Util A-L*, 5-21, 5-29, 5-37; (P) *Concepts*, 23-5
 - /NAME qualifier, (P) *Alpha SDA*, SDA-107, SDA-139
 - Names
 - See Device names, Handles, Logical names, Node names, Process names, and Symbolic names
 - detached processes, (G) *DCL N-Z*, DCLII-57
 - domain, (S) *TCP/IP*, 2-7
 - subdomain, (S) *TCP/IP*, 2-7
 - symbol definition, (G) *DCL A-M*, DCLI-5
 - Name services, (P) *Concepts*, 10-1, 11-1
 - Namespaces
 - DECnet use of, (S) *DECnet Mgmt*, 3-22
 - example of, (S) *Dependable*, 7-16
 - in DECnet/OSI full name, (S) *Sys Mgr Tuning*, 21-3
 - listing information, (P) *Concepts*, 11-13
 - \$name_G macro, (P) *Interfaces*, A-6
 - \$name_G macro call, (P) *Interfaces*, A-7
 - \$name_S macro, (P) *Interfaces*, A-6
 - \$name_S macro call, (P) *Interfaces*, A-6
 - Naming
 - DCE Cell Directory Server, (P) *Environment*, 3-6
 - system services, (P) *Environment*, 10-6, 10-10
 - Naming conventions, (P) *Modular Proc*, 3-1, A-4
 - capability objects, (S) *Security*, 5-1
 - common event flag clusters, (S) *Security*, 5-2
 - devices, (S) *Security*, 5-4
 - files, (S) *Security*, 5-8
 - for facilities, (P) *Modular Proc*, 3-1
 - for files, (P) *Modular Proc*, 3-4
 - for modules, (P) *Modular Proc*, 3-4
 - for procedures, (P) *Modular Proc*, 3-3
 - for program sections, (P) *Modular Proc*, 3-4
 - for queue and journal files for additional queue managers, (S) *Sys Mgr Essentials*, 12-5
 - global sections, (S) *Security*, 5-14
 - logical name tables, (S) *Security*, 5-16
 - macros, (P) *RMS Ref*, A-2
 - of devices, (S) *Sys Mgr Essentials*, 7-1
 - in a VMScluster environment, (S) *Sys Mgr Essentials*, 7-1
 - virtual terminals, (S) *Sys Mgr Essentials*, 7-11
 - queues, (S) *Security*, 5-17
 - resource domains, (S) *Security*, 5-18
 - security class, (S) *Security*, 5-20
 - services, (P) *RMS Ref*, 1-1, A-3
- Naming images, (P) *Linker*, LINK-13
- Naming shareable images, (P) *Linker*, LINK-30
- NAMs (name blocks), (P) *Environment*, 10-16; (P) *File Appl*, 5-8 to 5-10, 5-12; (P) *Alpha SDA*, SDA-75; (P) *VAX SDA*, SDA-80
- summary of fields, (P) *RMS Ref*, 5-1
- using from higher-level language, (P) *RMS Ref*, 5-2
- NARGS keyword, (P) *Interfaces*, A-4
- NAS (Network Application Support)
 - client/server software, (G) *SW Overview*, 2-7, 6-9
 - multivendor integration, (G) *SW Overview*, 1-2, 6-8; (P) *Environment*, 3-2
 - open systems library processing, (P) *Linker*, 2-14
 - product implementations, (G) *SW Overview*, 6-11
 - services and related products, (G) *SW Overview*, 6-10
 - services for distributed applications, (G) *SW Overview*, 2-8
 - software products, (G) *SW Overview*, 1-2, 2-6, 6-8; (P) *Environment*, 3-2
 - support for standards, (G) *SW Overview*, 2-6, 6-10
 - use on other vendor systems, (G) *SW Overview*, 2-8
- National Character Set (NCS) utility, (G) *DCL N-Z*, DCLII-1; (G) *SW Overview*, 4-9; (P) *Environment*, 11-2
- Refer also to the *OpenVMS National Character Set Utility Manual*
- National character set routines
 - See NCS routines
- National Institute of Standards and Technology
 - See NIST
- /NATIVE_ONLY qualifier, (P) *Linker*, LINK-21
- Natural alignment, (P) *Concepts*, 22-2
 - definition, (P) *Calling Std*, 1-5
 - performance, (P) *Concepts*, 22-2
- NBDS (numeric byte data string), (P) *LIB\$*, LIB-72
- NBP (next block pointer)
 - default for block transfer, (P) *RMS Ref*, 6-2
 - for block I/O, (P) *RMS Ref*, A-35
- NCB (network connect block), (S) *DECnet Intro*, 2-16; (S) *DECnet Mgmt*, 8-11, 8-27
- NCP (Network Control Program), (S) *DECnet Intro*, 2-16; (S) *DECnet Mgmt*, 1-13
- See also DECnet
 - accessing message descriptions using Help Message, (G) *Help Msg*, 2-7
 - as a network monitoring tool, (S) *DECnet Intro*, 4-1
 - auditing database modifications, (S) *Security*, 9-7
 - command functions, (S) *DECnet Mgmt*, 3-2

NCP (Network Control Program) (cont'd)

- command parameters affected by unsupported features, (S) *Comparison*, 6-5
- command prompting, (S) *DECnet Mgmt Util*, 1-4
- commands, (S) *Sys Mgr Tuning*, 21-11 to 21-15; (S) *DECnet Mgmt*, 1-12
- command syntax, (S) *DECnet Mgmt*, 3-3; (S) *DECnet Mgmt Util*, 1-2
- command words, (S) *DECnet Mgmt*, 3-2
- component syntax rules, (S) *DECnet Mgmt Util*, 1-7
- controlling proxy access, (S) *Sys Mgr Essentials*, 6-37
- counters, (S) *DECnet Intro*, 4-4
- Data Link layer events, (S) *DECnet Mgmt Util*, D-9
- DECnet circuit and line devices, (S) *DECnet Mgmt Util*, A-1
- defining cluster alias, (S) *VMScluster Sys*, 4-9
- definition, (S) *DECnet Mgmt*, 3-2
- disabling LAN adapter, (S) *VMScluster Sys*, 4-8
- display commands, (S) *Sys Mgr Tuning*, 21-15
- display types, (S) *DECnet Intro*, 4-2
- DNS (Distributed Name Service) events, (S) *DECnet Mgmt Util*, D-12
- enabling MOP service, (S) *VMScluster Sys*, 9-10, C-9
- End Communications layer events, (S) *DECnet Mgmt Util*, D-4
- Ethernet configurator, (S) *Sys Mgr Tuning*, 21-17
- exiting, (S) *DECnet Mgmt Util*, 2-1
- exiting the prompting sequence, (S) *DECnet Mgmt Util*, 1-5
- HELP facility, (S) *DECnet Mgmt Util*, 1-12
- issuing commands, (S) *DECnet Mgmt Util*, 1-2
- LIST command, (S) *DECnet Mgmt*, 3-73
- logging events, (S) *VMScluster Sys*, C-5
- logging line counters, (S) *VMScluster Sys*, 10-26
- Network Management layer events, (S) *DECnet Mgmt Util*, D-2
- OpenVMS system specific events, (S) *DECnet Mgmt Util*, D-12
- parameter syntax rules, (S) *DECnet Mgmt Util*, 1-7
- plural forms of component names, (S) *DECnet Intro*, 3-33
- prompt, (S) *DECnet Intro*, 3-33
- prompting examples, (S) *DECnet Mgmt Util*, 1-6
- prompt syntax, (S) *DECnet Mgmt Util*, 1-4
- Routing layer events, (S) *DECnet Mgmt Util*, D-4
- Session Control layer events, (S) *DECnet Mgmt Util*, D-4

NCP (Network Control Program) (cont'd)

- SHOW command, (S) *DECnet Mgmt*, 3-73
- specifying plural components, (S) *DECnet Mgmt*, 3-3, 3-74
- tailoring the configuration database, (S) *DECnet Intro*, 3-32; (S) *DECnet Mgmt*, 5-11
- TELL prefix, (S) *DECnet Mgmt*, 3-6
- testing network, (S) *Sys Mgr Tuning*, 21-17
- usage summary, (S) *DECnet Mgmt Util*, 2-1
- users, (S) *DECnet Mgmt*, 1-11
- using commands, (S) *DECnet Mgmt*, 3-1
- using to build or modify configuration database, (S) *Sys Mgr Tuning*, 21-11
- using to control proxy login, (S) *DECnet Intro*, 3-36
- using to define nodes, (S) *DECnet Intro*, 3-18
- using to display network information, (S) *DECnet Intro*, 4-1
- using to test network, (S) *DECnet Intro*, 4-7
- X.25 packet level events, (S) *DECnet Mgmt Util*, D-11

NCP commands, (S) *DECnet Mgmt*, 3-2

- ALL parameter with SET command, (S) *DECnet Intro*, 3-33
- CLEAR, (S) *DECnet Intro*, 3-10, 3-34
- continuing, (S) *DECnet Mgmt Util*, 1-2
- DEFINE, (S) *DECnet Intro*, 3-10, 3-33
- DEFINE LOGGING, (S) *DECnet Intro*, 4-5
- DEFINE NODE, (S) *DECnet Intro*, 3-18
- effect of invalid parameter value, (S) *DECnet Intro*, 4-10
- entering, (S) *DECnet Mgmt Util*, 1-2
- functions, (S) *DECnet Mgmt*, 3-2
- HELP, (S) *DECnet Intro*, 3-33
- LIST, (S) *DECnet Intro*, 3-34, 4-1
- LIST NODE, (S) *DECnet Intro*, 3-34
- PURGE, (S) *DECnet Intro*, 3-10, 3-34
- PURGE LOGGING, (S) *DECnet Intro*, 4-6
- PURGE NODE, (S) *DECnet Intro*, 3-34
- recalling, (S) *DECnet Mgmt Util*, 1-2
- remote execution of, (S) *DECnet Mgmt*, 3-6
- SET, (S) *DECnet Intro*, 3-10, 3-33
- SET EXECUTOR, (S) *DECnet Intro*, 3-36
- SET KNOWN NODES, (S) *DECnet Intro*, 3-18
- SET LOGGING, (S) *DECnet Intro*, 4-5
- SET MODULE CONFIGURATOR, (S) *DECnet Intro*, 4-6
- SET OBJECT, (S) *DECnet Intro*, 3-36
- SHOW, (S) *DECnet Intro*, 3-34, 4-1
- SHOW COUNTER, (S) *DECnet Intro*, 4-3
- SHOW LOGGING, (S) *DECnet Intro*, 4-6
- SHOW MODULE CONFIGURATOR, (S) *DECnet Intro*, 4-6
- SHOW NODE, (S) *DECnet Intro*, 3-34
- syntax, (S) *DECnet Mgmt*, 3-3
- to enable logging, (S) *DECnet Intro*, 4-5
- ZERO COUNTERS, (S) *DECnet Intro*, 4-3

NCS\$COMPARE routine, (P) *Util Routines*, NCS-7

NCS\$CONVERT routine, (P) *Util Routines*, NCS-9

NCS\$END_CF routine, (P) *Util Routines*, NCS-11

NCS\$END_CS routine, (P) *Util Routines*, NCS-12

NCS\$GET_CF routine, (P) *Util Routines*, NCS-13

NCS\$GET_CS routine, (P) *Util Routines*, NCS-15

NCS\$RESTORE_CF routine, (P) *Util Routines*, NCS-17

NCS\$RESTORE_CS routine, (P) *Util Routines*, NCS-19

NCS\$SAVE_CF routine, (P) *Util Routines*, NCS-21

NCS\$SAVE_CS routine, (P) *Util Routines*, NCS-23

NCS command, (G) *DCL N-Z, DCLII-1*

NCS routines, (P) *Util Routines*, NCS-1

 C program sample, (P) *Util Routines*, NCS-2

 Fortran program sample, (P) *Util Routines*, NCS-2

 list of, (P) *Util Routines*, NCS-1

 typical application of, (P) *Util Routines*, NCS-2

NCS utility

 See National Character Set (NCS) utility

NEF option, (P) *Rec Mgmt Util*, 4-20

Negative compression, (P) *Rec Mgmt Util*, 4-4

Negative operator (-), (P) *Alpha SDA*, SDA-13; (P) *VAX SDA*, SDA-16

Nested unwind, (P) *Calling Std*, 6-25

NET\$NODE_COUNTER_BLOCKS logical names, (S) *DECnet Mgmt*, 5-34

NET\$PROXY.DAT file, (G) *V6.2 New Feat*, 3-17, 3-18; (S) *Sys Mgr Essentials*, 11-7

 description of, (S) *Sys Mgmt Util A-L*, 5-3

NET\$PROXY.DAT files, (S) *Security*, 12-6; (S) *Sys Mgr Essentials*, 6-4, 6-34

 auditing, (S) *Security*, 9-3

DECnet/OSI authorization elements, (S) *VMScluster Sys*, 5-13

 moving to reduce system disk I/O, (S) *Sys Mgr Tuning*, 16-8

NET\$PROXY logical name

 defining to reduce system disk I/O, (S) *Sys Mgr Tuning*, 16-8

NETACP\$BUFFER_LIMIT logical name, (S) *DECnet Mgmt*, 5-33

NETACP (network ancillary control program), (S) *DECnet Mgmt*, 1-13, 4-2, 5-33

NetBEUI, (G) *SW Overview*, 6-18

NETCONFIG.COM command procedure, (G) *Compatibility*, 2-7; (S) *Comparison*, 6-2; (S) *DECnet Intro*, 2-16, 3-32; (S) *DECnet Mgmt*, 3-2

 See also DECnet

 automatic establishment of logging, (S) *DECnet Intro*, 4-5

NETCONFIG.COM command procedure (cont'd)

 configuring a node automatically, (S) *Sys Mgr Tuning*, 21-11, 21-12

 defining logging events, (S) *DECnet Intro*, 4-5

 dialog, (S) *DECnet Intro*, 3-15; (S) *DECnet Mgmt*, 5-7

 introduction, (S) *DECnet Mgmt*, 1-14

 network configuration, (S) *DECnet Intro*, 3-10, 3-11

 supplying node address, (S) *DECnet Mgmt*, 5-5

 to establish default nonprivileged DECnet account and directory, (S) *DECnet Intro*, 3-37

 using, (S) *DECnet Mgmt*, 5-5

NETCONFIG_UPDATE.COM command procedure, (G) *Compatibility*, 2-6; (S) *Comparison*, 6-2

 introduction, (S) *DECnet Mgmt*, 1-14

 using, (S) *DECnet Mgmt*, 5-10

NETDEF.STB file, (P) *Alpha SDA*, SDA-15; (P) *VAX SDA*, SDA-64

NETDRIVER (network driver), (S) *DECnet Mgmt*, 1-13, 5-32

 connecting, (S) *Sys Mgr Essentials*, 7-7, 7-8

NETMBX privilege, (S) *Security*, A-9; (S) *DECnet Mgmt*, 2-31, 5-1

 for network operations, (S) *DECnet Intro*, 2-2, 3-1

NETNODE_REMOTE.DAT file

 authorization elements, (S) *VMScluster Sys*, 5-19

 renaming to SYS\$COMMON directory, (S) *VMScluster Sys*, 4-8

 updating, (S) *VMScluster Sys*, 8-39

NETNODE_REMOTE logical name

 defining during system startup, (S) *Sys Mgr Essentials*, 5-8

NETNODE_UPDATE.COM command procedure, (S) *VMScluster Sys*, 10-5

NETNODE_UPDATE.DAT file

 authorization elements, (S) *VMScluster Sys*, 5-19

NETOBJECT.DAT file

 authorization elements, (S) *VMScluster Sys*, 5-13

NETPROXY.DAT files, (G) *V6.2 New Feat*, 3-17; (G) *SW Overview*, 3-15; (S) *Security*, 12-6; (S) *Sys Mgr Essentials*, 6-4, 6-34; (S) *DECnet Mgmt*, 2-35

 auditing, (S) *Security*, 9-3

 authorization elements, (S) *VMScluster Sys*, 5-13

 creating, (S) *Sys Mgmt Util A-L*, 5-25

 description of, (S) *Sys Mgmt Util A-L*, 5-3

 displaying proxy access, (S) *Sys Mgmt Util A-L*, 5-52

 intracluster security, (S) *VMScluster Sys*, 5-17

 modifying, (S) *Sys Mgmt Util A-L*, 5-3

- NETPROXY.DAT files (cont'd)
 - moving to reduce system disk I/O, (S) *Sys Mgr Tuning*, 16-8
 - normal protection, (S) *Security*, 7-23
 - permanent proxy database, (S) *DECnet Intro*, 3-35
 - setting up, (S) *VMScluster Sys*, 5-17
- NETPROXY logical name
 - defining during system startup, (S) *Sys Mgr Essentials*, 5-8
 - defining to reduce system disk I/O, (S) *Sys Mgr Tuning*, 16-8
- NETSERVER\$TIMEOUT value, (S) *DECnet Mgmt*, 2-27, 8-11
- NETSERVER (network server process), (S) *DECnet Mgmt*, 2-26, 2-27, 8-11
 - timeouts, (S) *DECnet Mgmt*, 2-26, 8-11
- NETSERVER.LOG file, (S) *DECnet Intro*, 4-11; (S) *DECnet Mgmt*, 4-17
 - as troubleshooting aid, (S) *DECnet Intro*, 4-15
- NETUAF.DAT file, (S) *DECnet Mgmt*, 2-31
- NetWare, (G) *SW Overview*, 6-18
 - protocols, (G) *SW Overview*, 6-25
- Network access control strings, (G) *User*, 19-7; (S) *Security*, 3-13, 3-14, 7-16, 12-3
- Network accounts
 - See DECnet accounts
- Network address
 - security triplet, (S) *DECams*, 1-5
- Network application examples
 - in C language, (S) *DECnet Intro*, 2-15
- Network Application Support
 - See NAS
- Network byte data string
 - See NBDs
- Network command procedures
 - See STARTNET.COM and NETCONFIG.COM
- Network command terminal facility, (S) *DECnet Intro*, 3-3
- Network control block
 - See NCB
- Network Control Program
 - See NCP
- Network counters, (S) *DECnet Intro*, 4-1
 - resetting to zero, (S) *DECnet Intro*, 4-3
 - summary, (S) *DECnet Mgmt Util*, B-1 to B-15
- Network databases, (S) *Security*, 12-16
- Network default access
 - for VMScluster members, (S) *DECnet Mgmt*, 5-10
- Network driver
 - See NETDRIVER
- Network file specifications
 - conventional format, (G) *User*, 4-8
 - foreign file format, (G) *User*, 4-8
 - task specification strings, (G) *User*, 4-8
 - ULTRIX restrictions, (G) *User*, 4-8
- Network file system
 - See NFS
- Network identifiers, (S) *Security*, 4-3; (S) *Sys Mgr Essentials*, 11-11
- Network Information and Control Exchange
 - See NICE
- Networking
 - See also Communications, Network management tasks
 - models, (S) *TCP/IP*, 2-1
- Network interface
 - to OpenVMS, (S) *DECnet Intro*, 1-5; (S) *DECnet Mgmt*, 1-2
- Network Interface layer, (S) *TCP/IP*, 2-3
- Network logins, (S) *Security*, 3-7
- Network management, (G) *SW Overview*, 2-16, 3-12, 6-5, 6-16
- Network management listener
 - See NML
- Network management tasks
 - differences on Alpha and VAX systems, (G) *Compatibility*, 2-6; (S) *Comparison*, 6-3
 - DECnet/OSI for OpenVMS, (G) *Compatibility*, 2-1
 - routing support, (G) *Compatibility*, 2-7
 - similarities on Alpha and VAX systems, (G) *Compatibility*, 2-6; (S) *Comparison*, 6-1, 6-2
 - configuring the DECnet database, (G) *Compatibility*, 2-6
 - DECnet cluster alias, (G) *Compatibility*, 2-6
 - DECnet objects and associated accounts, (G) *Compatibility*, 2-6
 - downline loading, (G) *Compatibility*, 2-6
 - DTS/DTR, (G) *Compatibility*, 2-6
 - DVNETEND end-node license, (G) *Compatibility*, 2-6
 - end-node support, (G) *Compatibility*, 2-7
 - Ethernet monitor (NICONFIG), (G) *Compatibility*, 2-6
 - Ethernet support, (G) *Compatibility*, 2-7
 - event logging, (G) *Compatibility*, 2-6
 - FDDI support, (G) *Compatibility*, 2-7
 - file access listener, (G) *Compatibility*, 2-6
 - file transfer, (G) *Compatibility*, 2-6
 - loopback mirror testing, (G) *Compatibility*, 2-6
 - NETCONFIG.COM, (G) *Compatibility*, 2-7
 - NETCONFIG_UPDATE.COM, (G) *Compatibility*, 2-6
 - network size, (G) *Compatibility*, 2-6
 - node name rules, (G) *Compatibility*, 2-6
 - SET HOST capabilities, (G) *Compatibility*, 2-6
 - starting network access, (G) *Compatibility*, 2-6

Network management tasks

similarities on Alpha and VAX systems (cont'd)

STARTNET.COM, (G) *Compatibility*, 2-6

task-to-task communications, (G)

Compatibility, 2-6

upline dump, (G) *Compatibility*, 2-6

Network managers

assigning node names, (S) *DECnet Intro*, 3-18

coordinating with other networks, (S) *DECnet Intro*, 3-38

privilege requirements, (S) *DECnet Intro*, 3-6

responsibilities, (S) *DECnet Intro*, 2-16 to 2-17

Network names

declaring, (S) *DECnet Mgmt*, 8-29, 8-38

Network nodes

See Nodes

Network operating system

See NOS

Network operations

bringing up a system as a new node, (S)

DECnet Intro, 3-4

for the advanced user, (S) *DECnet Intro*, 2-12

for the general user, (S) *DECnet Intro*, 2-1 to 2-11

monitoring, (S) *DECnet Intro*, 4-6

using Mail utility, (S) *DECnet Intro*, 2-2

using Phone utility, (S) *DECnet Intro*, 2-2

Network operators

designated by OPCOM, (S) *DECnet Intro*, 4-4

enabling terminal as, (S) *DECnet Intro*, 4-4

Network process failures

potential causes, (S) *DECnet Mgmt*, 2-27

Network proxy accounts, (S) *Sys Mgr Essentials*, 6-34

Network proxy authorization files

creating, (S) *Sys Mgmt Util A-L*, 5-25

for Alpha and VAX, (S) *Sys Mgmt Util A-L*, 5-3

modifying, (S) *Sys Mgmt Util A-L*, 5-3

Networks, (G) *SW Overview*, 1-4, 1-9; (S)

TCP/IP, 1-1; (S) *DECnet Intro*, 1-1

See also Communications, DECnet, and Nodes

access, (S) *DECnet Intro*, 1-1, 2-2; (S)

DECnet Mgmt, 1-18

access control, (S) *Security*, 12-3; (S) *DECnet Mgmt*, 2-29

allowing for LAN bridge failover, (S)

Dependable, 7-9

alternate adapter booting for satellite nodes,

(S) *Dependable*, 7-9

and program I/O statements, (S) *DECnet Intro*, 2-12

application program, (S) *DECnet Intro*, 1-5, 2-12, 2-15

area routing, (S) *Sys Mgr Tuning*, 21-6

bridge, (S) *Sys Mgr Tuning*, 21-7; (S) *DECnet Intro*, 1-7

bringing up, (S) *DECnet Mgmt*, 6-2

Networks (cont'd)

bringing up nodes, (S) *DECnet Intro*, 3-1

channel, (S) *Sys Mgr Tuning*, 21-5

circuit

definition, (S) *Sys Mgr Tuning*, 21-4

circuit devices, (S) *DECnet Mgmt Util*, A-1

communication, (S) *DECnet Intro*, 1-2

communications device, (S) *Sys Mgr Essentials*, 7-7, 7-8

communications line, (S) *Sys Mgr Tuning*, 21-12

component, (S) *DECnet Intro*, 3-33

displaying information, (S) *DECnet Intro*, 4-3

component name, (S) *DECnet Intro*, 3-33, 4-2

concepts, (S) *DECnet Intro*, 1-1

configuration command procedure

See NETCONFIG.COM

configuration procedure, (S) *DECnet Mgmt*, 5-19 to 5-35

configurations, (S) *Sys Mgr Tuning*, 21-6; (S) *DECnet Intro*, 1-3, 2-16, 3-8, 3-10; (S) *DECnet Mgmt*, 1-3, 5-1

See also Configurations, network

congestion causes of packet loss, (S)

VMSccluster Sys, F-12

connecting to existing, (S) *Sys Mgr Tuning*, 21-12

connections, (S) *Sys Mgr Tuning*, 21-8; (S) *VMSccluster Sys*, 6-24; (S) *DECnet Intro*, 1-7, 3-4

local area, (S) *Sys Mgr Tuning*, 21-8

multipoint, (S) *Sys Mgr Tuning*, 21-9

point-to-point, (S) *Sys Mgr Tuning*, 21-8

wide area, (S) *Sys Mgr Tuning*, 21-8

worldwide, (S) *Sys Mgr Tuning*, 21-9

connection verification, (S) *DECnet Intro*, 3-29, 3-31

CPU time requirements, (S) *DECnet Mgmt*, 5-32

creating a new network, (S) *DECnet Intro*, 2-16, 3-1

database, (S) *DECnet Intro*, 3-8, 3-18, 3-26

data flow, (S) *DECnet Intro*, 1-1

debugging over, (P) *Debugger*, 2-4, 5-9

decentralized, (S) *DECnet Mgmt*, 1-2

DECnet, (G) *SW Overview*, 6-2; (S) *DECnet Intro*, 1-1, 1-5

default access for existing systems, (S) *DECnet Mgmt*, 5-10

definition, (S) *Sys Mgr Tuning*, 21-4

deleting nodes, (S) *DECnet Intro*, 3-34

dependability characteristics, (S) *Dependable*, 7-1

determining configuration changes, (S) *DECnet Intro*, 4-2

displaying, (S) *DECnet Mgmt*, 8-1

Networks (cont'd)

- displaying information about, (S) *DECnet Intro*, 4-1
- displaying logging activities, (S) *DECnet Intro*, 4-6
- displaying nodes, (S) *DECnet Intro*, 3-34
- distributed, (P) *Environment*, 3-1
- distributed processing capability, (G) *SW Overview*, 2-10
- emulator product, (S) *DECnet Intro*, 1-6
- end node, (S) *Sys Mgr Tuning*, 21-6
- environment, (S) *DECnet Intro*, 1-7
- error message explanations, (S) *DECnet Intro*, 4-10
- error messages, (S) *DECnet Intro*, 2-9
- Ethernet
 - definition, (S) *Sys Mgr Tuning*, 21-5
- Ethernet and FDDI options, (S) *Dependable*, 7-8
- event logging, (S) *DECnet Intro*, 3-11
- example, (S) *DECnet Mgmt*, 1-14
- file operations, (S) *DECnet Intro*, 2-4
- file transfers on TCP/IP, (G) *Compatibility*, 2-2
- gateway, (S) *DECnet Intro*, 1-5, 1-6, 1-13
- getting information about nodes, (S) *Sys Mgr Tuning*, 21-10
- getting started, (S) *DECnet Intro*, 3-1
- HELLO datagram congestion, (S) *VMScluster Sys*, G-2
- heterogeneous, (G) *SW Overview*, 6-2
- INBOUND parameter, (S) *Security*, 12-16; (S) *DECnet Intro*, 3-26
- installation, (S) *DECnet Intro*, 3-1
- installation procedure, (S) *DECnet Intro*, 3-9
- installation verification, (S) *DECnet Intro*, 3-31
- integrated, (G) *SW Overview*, 6-2; (S) *DECnet Intro*, 1-1, 1-5, 1-7, 1-14
- interconnect products, (S) *DECnet Intro*, 1-6
- interface
 - OpenVMS, (S) *Sys Mgr Tuning*, 21-7
- interfaces, (G) *Compatibility*, 2-2
- Internet, (G) *V6.2 New Feat*, 3-23; (S) *Sys Mgr Tuning*, 21-13
- LAN enhancements, (G) *V6.2 New Feat*, 6-1; (S) *Sys Mgr Tuning*, 22-1
- large, (S) *DECnet Intro*, 1-3
- limiting number of areas, (S) *DECnet Mgmt*, 3-51
- line
 - definition, (S) *Sys Mgr Tuning*, 21-4
- line devices, (S) *DECnet Mgmt Util*, A-1
- local area network, (S) *DECnet Intro*, 1-5, 1-7
- logical link
 - definition, (S) *Sys Mgr Tuning*, 21-4
- logout, (G) *User*, 2-24
- loopback tests, (S) *Sys Mgr Tuning*, 21-17
- losing connection to remote system, (G) *User*, 2-25

Networks (cont'd)

- maintenance, (S) *DECnet Intro*, 2-16
- management, (S) *DECnet Intro*, 2-16
 - differences on Alpha and VAX systems, (S) *Comparison*, 6-3 to 6-8
 - functions, (S) *DECnet Mgmt*, 1-2
 - layer events, (S) *DECnet Mgmt Util*, D-2
 - migration issues, (S) *Comparison*, 6-1
 - responsibilities, (S) *DECnet Mgmt*, 1-12
 - similarities on Alpha and VAX systems, (S) *Comparison*, 6-1 to 6-2
- managing, (G) *SW Overview*, 2-1
- managing a node, (S) *Sys Mgr Tuning*, 21-14
- monitoring, (S) *DECnet Intro*, 2-16; (S) *DECnet Mgmt*, 3-72
- monitoring and testing, (S) *DECnet Intro*, 4-1 to 4-17
- monitoring tools, (S) *Sys Mgr Tuning*, 21-15; (S) *DECnet Intro*, 4-1, 4-6
 - DTS/DTR, (S) *Sys Mgr Tuning*, 21-17
 - Monitor utility, (S) *Sys Mgr Tuning*, 21-17
 - NCP display commands, (S) *Sys Mgr Tuning*, 21-15
 - NCP Ethernet configurator, (S) *Sys Mgr Tuning*, 21-17
- multinode, (S) *Sys Mgr Tuning*, 21-5; (S) *DECnet Mgmt*, 1-2
- multiple-area, (S) *Sys Mgr Tuning*, 21-6; (S) *DECnet Intro*, 1-3; (S) *DECnet Mgmt*, 1-2
- multiple-site, (S) *Sys Mgr Tuning*, 21-9
- node failures, (S) *Dependable*, 4-11
- normal memory requirements, (S) *DECnet Mgmt*, 5-31
- object
 - definition, (S) *Sys Mgr Tuning*, 21-4
- open, (G) *SW Overview*, 2-6
- OSI, (G) *SW Overview*, 6-2
- packet switching, (S) *DECnet Intro*, 1-5, 1-6, 1-13
- parameters
 - See Displaying network parameters
- passwords, (S) *DECnet Mgmt*, 2-33
- PATHWORKS connectivity, (G) *SW Overview*, 6-24
- PATHWORKS transports, (G) *SW Overview*, 6-18
- PEDRIVER implementation, (S) *VMScluster Sys*, F-4
- performance consulting from Digital, (S) *Dependable*, 10-7
- planning configuration, (S) *Sys Mgr Tuning*, 21-12
- proactive network monitoring and analysis
 - products, (S) *Dependable*, 7-17
- problem isolation, (S) *DECnet Intro*, 4-12
- problems and solutions, (S) *DECnet Intro*, 4-10 to 4-17
- protocols, (G) *Compatibility*, 2-2

Networks (cont'd)

- providing multiple paths to Ethernet and FDDI, (S) *Dependable*, 7-4
- proxy database
 - creating, (S) *Sys Mgr Essentials*, 6-35
 - logical name defining location, (S) *Sys Mgr Essentials*, 5-8
- proxy login for applications, (S) *Security*, 12-4
- purging nodes, (S) *DECnet Intro*, 3-34
- recommendations for VMScluster environments, (S) *Dependable*, 7-5
- remote file operations, (G) *SW Overview*, 5-11
- remote node database
 - logical name defining location, (S) *Sys Mgr Essentials*, 5-8
- restarting, (S) *DECnet Intro*, 3-32
- restrictions on mixed, (S) *DECnet Mgmt*, 2-16
- retransmission problems, (S) *VMScluster Sys*, F-18
- router, (S) *Sys Mgr Tuning*, 21-5
- routing, (G) *SW Overview*, 1-11; (S) *DECnet Intro*, 1-1
 - adaptive, (S) *Sys Mgr Tuning*, 21-5
 - definition, (S) *Sys Mgr Tuning*, 21-5
- routing message, (S) *DECnet Intro*, 1-2
- sample VMScluster failure analysis program, (S) *Dependable*, 7-9
- save sets, (S) *Sys Mgr Essentials*, 10-7
- security, (G) *SW Overview*, 3-14, 6-7; (S) *VMScluster Sys*, 5-17; (S) *DECnet Intro*, 3-21, 3-38; (S) *DECnet Mgmt*, 2-33
 - providing for, (S) *Sys Mgr Tuning*, 21-12
- sending mail over, (G) *User*, 6-6
- shutting down, (S) *DECnet Intro*, 3-32; (S) *DECnet Mgmt*, 6-3
- size, (S) *DECnet Intro*, 1-3
 - comparison on Alpha and VAX systems, (G) *Compatibility*, 2-6
- small, (S) *DECnet Intro*, 1-3
- software, (G) *SW Overview*, 1-2
- standards, (G) *SW Overview*, A-2
- starting, (S) *DECnet Intro*, 3-14
- starting access procedure, (G) *Compatibility*, 2-6
- starting automatically from system boot, (S) *DECnet Intro*, 3-32
- starting in system startup, (S) *Sys Mgr Essentials*, 5-15
- starting manually, (S) *DECnet Intro*, 3-32
- startup values, (S) *DECnet Intro*, 4-1
- statistics in Monitor utility, (S) *Sys Mgmt Util M-Z*, 1-19
- task-to-task applications, (S) *DECnet Intro*, 2-14
- TCP/IP, (G) *SW Overview*, 6-2, 6-6
- terminal, (S) *DECnet Mgmt*, 3-62

Networks (cont'd)

- testing, (S) *DECnet Intro*, 4-7; (S) *DECnet Mgmt*, 7-1; (S) *DECnet Mgmt Util*, 3-49, 3-51, 3-52, 3-54, 4-1
 - using NCP (Network Control Program), (S) *Sys Mgr Tuning*, 21-17
- topology, (S) *DECnet Mgmt*, 1-14
- transient problems, (S) *DECnet Intro*, 3-31
- troubleshooting, (S) *DECnet Intro*, 2-16, 4-1 to 4-17
 - turning on, (S) *DECnet Intro*, 3-14
 - turning on manually, (S) *DECnet Intro*, 3-32
- updating satellite data in NETNODE_REMOTE.DAT, (S) *VMScluster Sys*, 8-39
- user applications, (G) *SW Overview*, 6-6
- user interface to, (S) *DECnet Mgmt*, 1-17
- user operations, (S) *DECnet Mgmt*, 1-17, 8-1
- verifying connection to, (S) *Sys Mgr Tuning*, 21-12
- VMScluster satellite synonym, (S) *Dependable*, 7-9
- wide area network, (S) *DECnet Intro*, 1-5, 1-11
- worst-case memory requirements, (S) *DECnet Mgmt*, 5-32
- Network security, (S) *Security*, 3-14, 12-1 to 12-19
 - C2 systems and, (S) *Security*, C-7
 - events audited, (S) *Security*, 12-2
 - network object configuration, (S) *Security*, 12-11
- Network server process
 - See NETSERVER
- Network Services Protocol
 - See NSP
- Network tasks
 - declaring, (S) *DECnet Mgmt*, 8-8, 8-13, 8-29
- Network transports
 - supported by DCE, (P) *Environment*, 3-6
- Network troubleshooting
 - See LAVC\$FAILURE_ANALYSIS.MAR program
- Network user authorization file
 - See NETPROXY.DAT
- Network work areas
 - See NWAs
- /NETWORK_BLOCK_COUNT qualifier
 - for specifying maximum record size, (P) *RMS Ref*, 4-23
- NETWORK_DATA_CHECKING attribute, (P) *Rec Mgmt Util*, 4-31
- Newsgroups, (S) *TCP/IP*, 3-6
- New stack region, (P) *Calling Std*, 3-59
- /NEW_VERSION qualifier
 - in Backup utility, (S) *Sys Mgmt Util A-L*, 7-47

- nextafter routine, (P) *Portable Math*, DPML-45, B-11
- NEXT command, (P) *File Appl*, 10-11 to 10-15
- %NEXTDISP built-in symbol, (P) *Debugger*, 11-24
- %NEXTINST built-in symbol, (P) *Debugger*, 11-24
- Next key option
See also RAB\$V_NXT option
- Next-key option, (P) *File Appl*, 8-8, 8-9
- %NEXTLOC built-in symbol, (P) *Debugger*, 8-8, 8-13, B-6
- %NEXTOUTPUT built-in symbol, (P) *Debugger*, 11-24
- /NEXT qualifier, (P) *Debugger*, 10-6
- Next-record position, (P) *File Appl*, 8-17, 8-18
- %NEXTSCROLL built-in symbol, (P) *Debugger*, 11-24
- %NEXTSOURCE built-in symbol, (P) *Debugger*, 11-24
- Next Volume service, (P) *RMS Ref*, RMS-57; (P) *File Appl*, 8-5
condition values, (P) *RMS Ref*, RMS-59
control block input and output fields, (P) *RMS Ref*, RMS-58
flush logic, (P) *RMS Ref*, RMS-58
input and output logic sequences, (P) *RMS Ref*, RMS-58
requirements for using, (P) *RMS Ref*, RMS-58
- %NEXT_PROCESS built-in symbol, (P) *Debugger*, 14-11
- %NEXT_SCOPE_ENTRY built-in symbol, (P) *Debugger*, B-11
- %NEXT_TASK built-in symbol, (P) *Debugger*, 16-14
- Nexus numbers
showing, (S) *Sys Mgmt Util M-Z*, 5-23, 5-24, 5-29
- NFS (network file system), (G) *SW Overview*, 6-7; (S) *TCP/IP*, 2-5, 4-1; (P) *Environment*, 3-2
option, (P) *Rec Mgmt Util*, 4-21
protocols, (G) *SW Overview*, 1-10
server software, (G) *SW Overview*, 2-6
support for file access, (G) *SW Overview*, 2-11
- NICE (Network Information and Control Exchange), (S) *DECnet Mgmt*, 3-2
- NICONFIG
Ethernet monitor, (G) *Compatibility*, 2-6
- NICONFIG (Ethernet configurator), (S) *DECnet Mgmt*, 1-12
- NIL option, (P) *Rec Mgmt Util*, 4-36
- nint routine, (P) *Portable Math*, DPML-46, B-11
- NISCA transport protocol, (S) *VMScluster Sys*, F-1
capturing data, (S) *VMScluster Sys*, F-29
CC header, (S) *VMScluster Sys*, F-23
CC protocol, (S) *VMScluster Sys*, F-3
channel formation problems, (S) *VMScluster Sys*, F-17
- NISCA transport protocol (cont'd)
datagram flags, (S) *VMScluster Sys*, F-25
datagrams, (S) *VMScluster Sys*, F-21
definition, (S) *VMScluster Sys*, F-1
diagnosing with a LAN analyzer, (S) *VMScluster Sys*, F-20
DX header, (S) *VMScluster Sys*, F-22
DX protocol, (S) *VMScluster Sys*, F-3
function, (S) *VMScluster Sys*, F-3
LAN Ethernet header, (S) *VMScluster Sys*, F-21
LAN FDDI header, (S) *VMScluster Sys*, F-22
packet format, (S) *VMScluster Sys*, F-20
packet loss, (S) *VMScluster Sys*, F-12
PEDRIVER implementation, (S) *VMScluster Sys*, F-4
PI protocol, (S) *VMScluster Sys*, F-3
PPC protocol, (S) *VMScluster Sys*, F-3
PPD protocol, (S) *VMScluster Sys*, F-3
retransmission problems, (S) *VMScluster Sys*, F-18
TR header, (S) *VMScluster Sys*, F-25
troubleshooting, (S) *VMScluster Sys*, F-1
TR protocol, (S) *VMScluster Sys*, F-3
- NISCS_CONV_BOOT system parameter, (S) *Security*, C-10; (S) *VMScluster Sys*, 8-10, A-2, C-6
- NISCS_LAN_OVRHD system parameter, (S) *VMScluster Sys*, A-2
- NISCS_LOAD_PEA0 system parameter, (S) *VMScluster Sys*, A-2, C-13
caution when setting to 1, (S) *VMScluster Sys*, 8-22, A-3
- NISCS_MAX_PKTSZ system parameter, (S) *VMScluster Sys*, 10-17, A-3
- NISCS_PORT_SERV system parameter, (S) *VMScluster Sys*, A-6
- NIST (National Institute of Standards and Technology), (G) *SW Overview*, 2-2, A-1
- NLK option, (P) *Rec Mgmt Util*, 4-12
- NMCC/VAX ETHERnim
See ETHERnim
- NMCC/Ethernet Network Integrity Monitor
See ETHERnim
- NML\$SERVER account
enabling default access, (S) *DECnet Mgmt*, 2-25, 5-3, 5-6
- NML (network management listener), (S) *DECnet Mgmt*, 1-13, 2-25, 4-2, 6-2
access control, (S) *DECnet Mgmt*, 3-68
default access account, (S) *DECnet Intro*, 3-13
NML\$SERVER account
default access, (S) *DECnet Mgmt*, 2-25, 5-3, 5-6
- nnDRIVER symbol, (P) *VAX SDA*, SDA-18

- No Access attribute, (S) *Security*, 8-9; (S) *Sys Mgmt Util A-L*, 5-21, 5-29, 5-37; (P) *Concepts*, 23-5
- Node
 - error messages, (S) *DECamds*, 3-14
- Node addresses, (S) *DECnet Intro*, 1-2, 3-8, 3-12; (S) *DECnet Mgmt*, 2-1, 2-18, 3-7; (S) *DECnet Mgmt Util*, 4-8, 4-11
 - changing local, (S) *DECnet Mgmt*, 3-9
 - conversion, (S) *DECnet Mgmt*, 2-18, 3-50
 - removing remote names and, (S) *DECnet Mgmt*, 3-9
- Node counters, (S) *DECnet Mgmt Util*, 3-160, 3-164, B-11
 - summary, (S) *DECnet Mgmt Util*, B-11
- Node databases
 - copying, (S) *DECnet Mgmt*, 1-14, 2-5, 3-21
 - permanent, (S) *DECnet Intro*, 3-18
 - volatile, (S) *DECnet Intro*, 3-18
- Node-level access control, (S) *DECnet Mgmt*, 2-33
- Node-level loopback tests, (S) *DECnet Mgmt*, 7-1
 - logical link operation, (S) *DECnet Mgmt*, 7-1
 - over specific circuit, (S) *DECnet Mgmt*, 7-1
- Node names, (S) *Sys Mgmt Util A-L*, 13-27; (S) *DECnet Intro*, 1-2, 3-8, 3-11, 3-12; (S) *DECnet Mgmt*, 2-1, 3-7; (S) *DECnet Mgmt Util*, 4-8, 4-11
 - assigning, (S) *Sys Mgr Tuning*, 21-3
 - cluster alias, (S) *DECnet Intro*, 2-4, 3-8
 - cluster alias used with Mail utility, (S) *DECnet Intro*, 2-11
 - clusterwide, (S) *DECnet Intro*, 2-4
 - creating logical names for, (G) *User*, 13-4 to 13-5
 - overriding the access control string, (G) *User*, 13-5
 - creating logical names for in file specification, (G) *User*, 13-5
 - DECnet/OSI full names, (S) *Sys Mgr Tuning*, 21-2
 - DECnet for OpenVMS, (S) *Sys Mgr Tuning*, 21-2
 - definition, (G) *User*, 4-2
 - displaying, (G) *DCL N-Z*, DCLII-350
 - format in file specifications, (G) *User*, 4-6
 - full, (G) *User*, 4-6
 - removing remote addresses and, (S) *DECnet Mgmt*, 3-9
 - required for OpenVMS InfoServer Client startup, (S) *Sys Mgr Tuning*, 23-10
 - rules, (G) *Compatibility*, 2-6; (S) *Comparison*, 6-2
 - rules for entering, (G) *User*, 4-6
 - specifying in MAIL, (S) *Sys Mgr Essentials*, 5-33
- Node numbers, (S) *DECnet Intro*, 3-12, 3-33; (S) *DECnet Mgmt*, 2-1, 2-18, 3-7
 - display on Alpha systems, (S) *Sys Mgmt Util M-Z*, 6-39; (S) *Comparison*, A-7
- (NODE) qualifier, (P) *Alpha SDA*, SDA-124; (P) *VAX SDA*, SDA-86, SDA-91
- Nodes, (S) *DECnet Intro*, 1-2; (S) *DECnet Mgmt*, 1-1, 1-17, 3-6
 - See also Alias node identifiers, End nodes, Local nodes, Remote nodes, Routers, and Satellite nodes
 - access control, (S) *DECnet Intro*, 3-36
 - accessing remote node interactively, (S) *DECnet Intro*, 3-3
 - addressing CI, (S) *DECnet Mgmt*, 3-26
 - adjacent, (S) *Sys Mgr Tuning*, 21-4; (S) *DECnet Intro*, 3-29; (S) *DECnet Mgmt*, 1-1, 2-16
 - adjacent on Ethernet, (S) *DECnet Mgmt*, 2-7
 - and batch jobs, (G) *DCL N-Z*, DCLII-410
 - area number, (S) *DECnet Mgmt*, 2-1
 - assigning to a group, (S) *DECamds*, 1-8
 - availability messages
 - setting broadcast intervals, (S) *DECamds*, 1-10
 - bringing up, (S) *DECnet Mgmt*, 6-2
 - bringing up on the network, (S) *DECnet Intro*, 3-1
 - checking type, (S) *DECnet Mgmt*, 1-10, 2-36, 3-70
 - clearing all counters, (S) *DECnet Mgmt Util*, 3-160, 3-164
 - clearing or purging database before copying, (S) *DECnet Mgmt*, 3-18
 - commands, (S) *DECnet Mgmt*, 3-5
 - configuring for DECnet, (S) *DECnet Intro*, 2-16, 3-10; (S) *DECnet Mgmt*, 1-14
 - configuring in a network, (S) *Sys Mgr Tuning*, 21-12
 - connecting, (G) *DCL N-Z*, DCLII-150
 - connecting to a HSC, (G) *DCL N-Z*, DCLII-162
 - connecting to a storage controller, (G) *DCL N-Z*, DCLII-160
 - connecting to network, (S) *Sys Mgr Tuning*, 21-8
 - conversion of Phase IV address, (S) *DECnet Mgmt*, 2-18
 - copying database, (S) *DECnet Mgmt*, 1-14, 2-5, 3-17
 - copying database using DCL COPY command, (S) *DECnet Mgmt*, 3-21
 - counters, (S) *DECnet Mgmt*, 3-21
 - crash fix, (S) *DECamds*, 4-4
 - database, (S) *Sys Mgmt Util A-L*, 13-30, 13-33; (S) *DECnet Intro*, 3-8, 3-18; (S) *DECnet Mgmt*, 3-1
 - DECnet, (S) *DECnet Intro*, 1-5, 3-1
 - default access account, (S) *DECnet Mgmt*, 1-22

Nodes (cont'd)

default data collection, (S) *DECamds*, 5-2
 definition, (S) *Sys Mgr Tuning*, 21-4; (S) *DECnet Mgmt*, 2-1
 deleting node information, (G) *V6.2 New Feat*, 6-21; (S) *Sys Mgr Tuning*, 22-20; (S) *Sys Mgmt Util A-L*, 12-9, 12-20
 determining status, (S) *DECnet Intro*, 4-2
 displaying characteristics of, (S) *Sys Mgmt Util A-L*, 13-50
 displaying counters, (S) *Sys Mgmt Util A-L*, 13-47
 displaying information using LATCP, (S) *Sys Mgmt Util A-L*, 13-46
 displaying name and address of local, (S) *DECnet Intro*, 3-2
 displaying network, (S) *DECnet Mgmt*, 8-1
 display of type, (S) *DECnet Mgmt*, 3-49
 establishing in network, (S) *Sys Mgr Tuning*, 21-11
 executor, (S) *DECnet Intro*, 3-10; (S) *DECnet Mgmt*, 2-1, 3-5
 getting information about other nodes in network, (S) *Sys Mgr Tuning*, 21-10
 identification, (S) *DECnet Mgmt*, 2-1, 2-2, 2-18, 3-7
 identifier, (S) *DECnet Intro*, 3-33
 in a VMScluster system, (G) *V6.2 New Feat*, 7-1
 initialization request, (S) *DECnet Mgmt*, 3-30
 in LAT database, (S) *Sys Mgr Tuning*, 24-8
 limit, (S) *Sys Mgmt Util A-L*, 13-30
 listing each accessible, (S) *DECnet Intro*, 3-2
 lock-mastering, (P) *File Appl*, 3-33
 lock-requesting, (P) *File Appl*, 3-33
 logging in to, (S) *DECnet Intro*, 3-1
 logical name in file specification, (S) *DECnet Mgmt*, 1-24
 loopback test, (S) *DECnet Intro*, 4-7
 modifying characteristics of, (S) *Sys Mgmt Util A-L*, 13-27
 monitoring, (S) *Sys Mgr Tuning*, 21-14
 multiple network, (S) *Sys Mgr Tuning*, 21-5
 non-LAN, (S) *DECnet Mgmt*, 1-7
 nonrouting, (S) *Sys Mgr Tuning*, 21-6; (S) *DECnet Mgmt*, 2-16
 parameters, (S) *DECnet Mgmt*, 2-4, 3-11
 phases, (S) *DECnet Mgmt*, 2-16
 preparing system to become network node, (S) *Sys Mgr Tuning*, 21-12
 preparing to bring up, (S) *DECnet Intro*, 3-4
 providing security for, (S) *Sys Mgr Tuning*, 21-12
 reachable
 definition, (S) *DECnet Mgmt*, 2-21
 reconfiguration, (S) *DECnet Intro*, 3-10, 3-11
 relocating, (S) *DECnet Intro*, 1-5
 remote node, (S) *DECnet Mgmt*, 3-30

Nodes (cont'd)

removing remote name and address, (S) *DECnet Mgmt*, 3-9
 router, (S) *DECnet Intro*, 1-2
 router definition, (S) *Sys Mgr Tuning*, 21-5
 routing, (S) *Sys Mgr Tuning*, 21-6; (S) *DECnet Mgmt*, 1-1, 2-15, 2-16
 security, (S) *DECnet Intro*, 3-34 to 3-38
 setting node information, (G) *V6.2 New Feat*, 6-18; (S) *Sys Mgr Tuning*, 22-18
 setting up, (G) *SW Overview*, 3-12
 shutdown procedure, (S) *DECamds*, A-13
 shutting down, (S) *DECnet Mgmt*, 6-3
 specification access control string, (S) *DECnet Mgmt*, 1-20
 specification string for, (S) *DECnet Mgmt*, 1-20
 state, (S) *Sys Mgmt Util A-L*, 13-32; (S) *DECnet Mgmt*, 2-4, 3-16
 target, (S) *Sys Mgmt Util A-L*, 13-54
 tools to monitor network, (S) *Sys Mgr Tuning*, 21-15
 transferring files between, (S) *Sys Mgr Essentials*, 9-24
 type, (S) *DECnet Intro*, 3-26; (S) *DECnet Mgmt*, 2-16, 3-49
 unreachable, (S) *DECnet Intro*, 4-12
 VMS, (S) *DECnet Intro*, 3-1
 Nodes Summary window, (S) *DECamds*, 3-12 to 3-14
 NODRIVER asynchronous driver, (S) *DECnet Mgmt*, 2-13, 2-14, 5-3, 5-11, 5-12, 5-15, 5-18
 NOFEEDBACK mode, (S) *Sys Mgmt Util A-L*, 6-8
 NOLOCK attribute, (P) *Rec Mgmt Util*, 4-12; (P) *File Appl*, 7-11
 /NOLOGICAL_NAMES qualifier, (P) *Alpha SDA*, SDA-158; (P) *VAX SDA*, SDA-183
 NOMOD program section attribute
 resolving conflicts, (P) *Linker*, 3-25
 Noncontiguous array descriptors, (P) *Calling Std*, 5-10
 Nondeductible resource, (S) *Sys Mgr Essentials*, 6-3
 None attribute (ACEs), (S) *Security*, 4-18
 NONE carriage control, (P) *Rec Mgmt Util*, 4-32
 NONEXISTENT_RECORD attribute, (P) *Rec Mgmt Util*, 4-12; (P) *File Appl*, 7-14, 8-8
 Noninteractive logins, (S) *Security*, 3-7
 Non OpenVMS systems
 specifying remote files on, (S) *TCP/IP*, 5-6
 Nonpaged dynamic storage pool
 displaying contents, (P) *VAX SDA*, SDA-134
 Nonpaged pool
 See Pool management

Paging

rates (cont'd)

Modified List Fault, (S) *Alpha Perform*, 10-4

System Fault, (S) *Alpha Perform*, 10-5

Write in Progress, (S) *Alpha Perform*, 10-4

symptoms

for disks, (S) *Alpha Perform*, 14-4

symptoms for disks, (S) *VAX Perform*, 4-29

Paging file process limit, (S) *Sys Mgr Essentials*, 6-43

Paging file sections, (P) *Concepts*, 19-20, 20-22
global, (P) *Concepts*, 19-20, 20-21

Paging I/O

See I/O

PAKs (Product Authorization Keys), (S)
Comparison, 6-1

DECnet for OpenVMS, (S) *DECnet Intro*, 1-5,
3-8; (S) *DECnet Mgmt*, 1-12, 2-17

DVNETEND DECnet end-node license on Alpha
and VAX systems, (G) *Compatibility*, 2-6

DVNETEXT DECnet for OpenVMS Alpha
extended license, (G) *Compatibility*, 2-7

DVNETRTG DECnet for OpenVMS VAX routing
license, (G) *Compatibility*, 2-7

end node, (S) *DECnet Intro*, 3-10

installing before using VMSINSTAL.COM
command procedure, (S) *Sys Mgr
Essentials*, 3-8

installing DECnet for OpenVMS license, (S)
DECnet Mgmt, 6-1

loading in system startup, (S) *Sys Mgr
Essentials*, 5-5

preventing nodes from sharing, (S) *Sys Mgr
Essentials*, 3-8

registering DECnet for OpenVMS, (S) *DECnet
Intro*, 3-1, 3-10

registering for DECnet, (S) *Sys Mgr Tuning*,
21-12

registering the DECnet for OpenVMS, (S)
DECnet Intro, 3-14

routing node, (S) *DECnet Intro*, 3-10

PALcode (privileged architecture library) code, (P)
Concepts, 14-10, 22-3

PALcode (privileged architecture library code), (G)
Compatibility, 4-7

PAN command, (S) *Sys Mgr Tuning*, 20-6

in Show Cluster utility, (S) *Sys Mgmt Util
M-Z*, 4-39

PAN keypad function, (S) *Sys Mgr Tuning*, 20-7;
(S) *Sys Mgmt Util M-Z*, B-3

Paper

See Printer paper and Stock

Paper jam

pausing printer to fix, (S) *Sys Mgr Essentials*,
13-75

Paper shredders, (S) *Security*, 3-20

Parallel processing, (P) *Concepts*, 14-27
initializing, (P) *Concepts*, 14-27
subprocess

creating, (P) *Concepts*, 14-27

deleting, (P) *Concepts*, 14-27

terminating, (P) *Concepts*, 14-27

using semaphores, (P) *Concepts*, 14-28

using spin locks, (P) *Concepts*, 14-27

Parameter (system) settings required for
installation, (S) *DECams*, A-3

Parameter files

See also System parameters

ALPHA VMSSYS.OLD, (S) *Sys Mgmt Util A-L*,
6-7

ALPHA VMSSYS.PAR, (S) *Sys Mgmt Util A-L*,
6-7

ALPHA VMSSYS.PAR (Alpha), (S) *Sys Mgr
Tuning*, 14-3

initializing parameters at boot time, (S)
Sys Mgr Tuning, 14-36

role in the boot process, (S) *Sys Mgr
Essentials*, 4-2

AUTOGEN.PAR, (S) *Sys Mgmt Util A-L*, 6-7

booting with alternate, (S) *Sys Mgr Essentials*,
4-7

changing

effects of, (S) *Sys Mgr Tuning*, 14-33

with SYSGEN, (S) *Sys Mgr Tuning*, 14-33

with SYSMAN, (S) *Sys Mgr Tuning*, 14-28

common in a VMScluster environment, (S) *Sys
Mgr Tuning*, 14-22

creating new

with SYSGEN, (S) *Sys Mgr Tuning*, 14-34

default, (S) *Sys Mgr Essentials*, 4-6; (S) *Sys
Mgr Tuning*, 14-3; (S) *Sys Mgmt Util A-L*,
6-7

including in MODPARAMS.DAT file, (S) *Sys
Mgr Tuning*, 14-22

limitation on error checking in, (S) *Sys Mgr
Tuning*, 14-19

MODPARAMS.DAT, (S) *Sys Mgr Tuning*,
14-17

sample, (S) *Sys Mgr Tuning*, 14-17

multiple, with AUTOGEN, (S) *Sys Mgr Tuning*,
14-22

VAX VMSSYS.OLD, (S) *Sys Mgmt Util A-L*, 6-7

VAX VMSSYS.PAR, (S) *Sys Mgmt Util A-L*, 6-7

VAX VMSSYS.PAR (VAX), (S) *Sys Mgr Tuning*,
14-3

initializing active parameters at boot time,
(S) *Sys Mgr Tuning*, 14-36

role in the boot process, (S) *Sys Mgr
Essentials*, 4-2

writing, (S) *Sys Mgmt Util M-Z*, 5-33, 6-51

Parameter lists

defaults for multiple file specifications, (G)
User, 5-6

- Parameter lists (cont'd)
- multiple file specifications, (G) *User*, 5-6
 - Parameters, (S) *Sys Mgmt Util M-Z*, 2-4
 - changing, (S) *Sys Mgmt Util M-Z*, 6-46
 - debugger command procedure, (P) *Debugger*, 12-2
 - in DCL command lines, (G) *User*, 3-3, 3-4
 - passing data to batch jobs with, (G) *User*, 16-5
 - passing data to nested command procedures with, (G) *User*, 16-5
 - passing to a startup command procedure, (S) *Sys Mgr Essentials*, 5-19
 - passing to batch jobs, (G) *DCL N-Z*, DCLII-409
 - passing to command procedures, (G) *DCL A-M*, DCLI-8, DCLI-52; (S) *Sys Mgmt Util A-L*, 12-7
 - setting SCSI, (G) *V6.2 New Feat*, 7-24
 - specifying
 - as character strings, (G) *User*, 16-3
 - as integers, (G) *User*, 16-3
 - as null values, (G) *User*, 16-4
 - as symbols, (G) *User*, 16-4
 - specifying for command procedures, (G) *DCL A-M*, DCLI-8
 - system parameters, (S) *Sys Mgmt Util M-Z*, C-1
 - using to pass data to command procedures, (G) *User*, 16-3
 - PARAMETERS command, (S) *Sys Mgr Essentials*, 2-11
 - in SYSMAN, (S) *Sys Mgr Tuning*, 14-25
 - summary, (S) *Sys Mgr Tuning*, 14-30
 - PARAMETERS DISABLE CHECKS command
 - in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-44
 - PARAMETERS ENABLE CHECKS command
 - in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-45
 - PARAMETERS SET command
 - in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-46
 - PARAMETERS SHOW command
 - in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-47
 - PARAMETERS USE command
 - in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-50
 - PARAMETERS WRITE command
 - in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-51
 - PARAMS.DAT file, (S) *Sys Mgmt Util A-L*, 6-6, 6-7
 - %PARCNT built-in symbol, (P) *Debugger*, 12-2, B-5
 - Parentheses ()
 - as precedence operators, (P) *Alpha SDA*, SDA-13; (P) *VAX SDA*, SDA-17
 - Parent lock, (P) *Concepts*, 15-14
 - /PARENT qualifier, (P) *Alpha SDA*, SDA-38; (P) *VAX SDA*, SDA-46
 - Parity bit, (P) *File Appl*, 1-16
 - Parity data
 - dependability features, (S) *Dependable*, 8-26
 - Parity flag, (P) *I/O User*, 5-42
 - \$PARSE macros
 - for processing wildcard characters, (P) *RMS Ref*, A-21
 - Parse service, (P) *RMS Ref*, RMS-69; (P) *File Appl*, 5-8 to 5-12
 - condition values, (P) *RMS Ref*, RMS-72
 - control block input fields, (P) *RMS Ref*, RMS-70
 - control block output fields, (P) *RMS Ref*, RMS-71
 - preparing for file search, (P) *RMS Ref*, A-20
 - preparing for wildcard character processing, (P) *RMS Ref*, RMS-70
 - program example, (P) *RMS Ref*, A-20
 - requirements for using, (P) *RMS Ref*, RMS-70
 - Partial sections, (P) *Concepts*, 20-26
 - /PARTICIPANTS qualifier, (P) *VAX SDA*, SDA-149
 - Partition, (S) *Sys Mgr Tuning*, 23-2
 - Partitioning groups, (S) *DECams*, 1-7
 - Partitioning of cluster, (S) *VMScluster Sys*, 2-5, C-18
 - Partner programs
 - capturing retransmitted packets, (S) *VMScluster Sys*, F-37
 - Pascal, (G) *SW Overview*, 4-6; (P) *Environment*, 7-3, 7-9
 - data type declarations, (P) *Interfaces*, B-40
 - implementation table, (P) *Interfaces*, B-40
 - LIB\$ESTABLISH, (G) *Compatibility*, 4-4
 - PASCAL compiler
 - generating reentrant code, (P) *DECthreads*, 3-4
 - Pascal program example
 - calling FDL\$PARSE and FDL\$RELEASE routines, (P) *File Appl*, 4-13
 - Passing mechanisms, (P) *Interfaces*, 1-9
 - by descriptor, (P) *Interfaces*, 2-15
 - code, (P) *Interfaces*, 1-10
 - by reference, (P) *Interfaces*, 2-14
 - by value, (P) *Interfaces*, 2-13
 - descriptor
 - definition, (P) *Calling Std*, 1-4
 - for arrays, (P) *Interfaces*, 2-18
 - for scalars, (P) *Interfaces*, 2-18
 - for strings, (P) *Interfaces*, 2-18
 - immediate value
 - definition, (P) *Calling Std*, 1-5
 - language extensions, (P) *Calling Std*, 2-5
 - reference
 - definition, (P) *Calling Std*, 1-5
 - \$PASSWORD card, (S) *Sys Mgr Essentials*, 7-17
 - PASSWORD command, (G) *DCL N-Z*, DCLII-10 to DCLII-11
 - Password generators, (G) *Compatibility*, 1-3
 - obtaining initial password, (S) *Security*, 7-13

Password generators (cont'd)

- using to obtain initial password, (S) *Sys Mgr Essentials*, 11-2
- when to require, (S) *Security*, 7-19

Password grabber programs, (S) *Security*, 3-14, 7-25

- catching with auditing ACEs, (S) *Security*, 9-6

Password management

- eliminating for networks, (S) *Security*, 12-5
- encryption algorithms, (S) *Security*, 7-19
- forced change, (S) *Security*, 7-18; (S) *Sys Mgr Essentials*, 11-4

- guidelines for protecting, (S) *Sys Mgr Essentials*, 11-5

- how to preexpire, (S) *Sys Mgr Essentials*, 11-3

- length of passwords, (S) *Sys Mgr Essentials*, 11-4

- password length, (S) *Security*, 7-19

- password restrictions, (S) *Security*, 7-17

- pre-expiring passwords, (S) *Security*, 7-13

- reasons to assign system passwords, (S) *Sys Mgr Essentials*, 11-3

- requiring generated passwords, (S) *Security*, 7-13

screening

- against dictionary, (S) *Security*, 7-20

- against history list, (S) *Security*, 7-21

- setting the expiration for, (S) *Sys Mgr Essentials*, 11-4

setting up

- console passwords, (S) *Security*, 7-16

- expiration time, (S) *Security*, 7-17

- primary passwords, (S) *Security*, 7-13

- secondary passwords, (S) *Security*, 7-15

- system passwords, (S) *Security*, 7-14

- setting up initial passwords, (S) *Sys Mgr Essentials*, 11-2

- when to use dual passwords, (S) *Sys Mgr Essentials*, 11-2

Password protection, (G) *User*, 2-17; (S) *Security*, 3-13, 7-22

- avoiding detection, (S) *Security*, 3-11, 10-6

- dialup retries, (G) *User*, 2-12; (S) *Security*, 3-9

- proxy logins, (S) *Security*, 3-15

Passwords, (G) *SW Overview*, 3-14; (S) *Sys Mgmt Util M-Z*, 6-53

- See also Security management

- acceptable, (G) *User*, 2-4; (S) *Security*, 3-2

- automatically generated, (S) *Security*, 3-10

- avoiding password theft programs, (G) *User*, 2-18

- avoiding use in file specification, (S) *DECnet Intro*, 2-3

- chances to supply during dialups, (S) *Security*, 3-9

- changing, (G) *User*, 2-3, 2-13; (G) *DCL N-Z*, DCLII-177; (S) *Security*, 3-9, 3-10

Passwords

changing (cont'd)

- at login, (G) *User*, 2-4; (S) *Security*, 3-11

- during login, (G) *User*, 2-16

- expired, (G) *User*, 2-16; (S) *Security*, 3-12

- frequency guidelines, (G) *User*, 2-4, 2-18; (S) *Security*, 3-14

- /NEW_PASSWORD qualifier, (S) *Security*, 3-11

- secondary, (G) *User*, 2-15; (S) *Security*, 3-11

- using /NEW_PASSWORD qualifier, (G) *User*, 2-16

- cluster membership management, (S) *Security*, 11-7

- conditions required for SYSMAN, (S) *Sys Mgr Essentials*, 2-13

- console, C2 system requirements, (S) *Security*, C-6

- dialup retries, (S) *Security*, 3-9

- dual, (G) *User*, 2-5; (S) *Security*, 3-2, 7-13

- encoding, (S) *Security*, 2-3

- entering when logging in, (S) *Sys Mgr Essentials*, 2-10

- expiration, (G) *User*, 2-3, 2-16; (S) *Security*, 3-12

- failure to change, (G) *User*, 2-17; (S) *Security*, 3-12

- first, (G) *User*, 2-4; (S) *Security*, 3-1

- forced change, (S) *Security*, 3-12

- for dynamic connection, (S) *DECnet Mgmt*, 2-29, 2-36

- forgotten by user, (S) *Sys Mgr Essentials*, 6-23
- for local area VMScluster, (S) *Sys Mgmt Util M-Z*, 6-15

- format, (S) *Security*, 3-1

- for VMScluster access

- modifying, (S) *Sys Mgr Tuning*, 20-16

- for VMScluster integrity, (S) *VMScluster Sys*, F-17, F-25

- generated, (G) *User*, 2-13, 2-14, 2-15; (S) *Security*, 3-10

- guessing, (G) *User*, 2-4; (S) *Security*, 3-1

- guidelines for choosing, (G) *User*, 2-3

- high-risk, (G) *User*, 2-3

- history list, (S) *Security*, 3-2; (S) *Sys Mgr Essentials*, 11-2

- incorrect, (G) *User*, 2-8; (S) *Security*, 3-6

- InfoServer system, (S) *Sys Mgr Tuning*, 23-6

- initial, (G) *User*, 2-4; (S) *Security*, 3-1, 7-13

- length, (G) *User*, 2-3, 2-4, 2-13; (S) *Security*, 3-1

- lifetime of, (S) *Security*, 3-9, 3-11

- locked, (G) *User*, 2-7; (S) *Security*, 3-4, 7-8, 7-19

- minimum length, (S) *Security*, 3-2, 7-19

- modifying system, (S) *Sys Mgr Essentials*, 6-9

- modifying user, (S) *Sys Mgr Essentials*, 6-13

Passwords (cont'd)

- multiple LAN configurations, (S) *VMScluster Sys*, 3-6
- multiple systems and, (S) *Security*, 3-13
- new, (G) *User*, 2-16; (S) *Security*, 3-11
- null as choice for captive account, (S) *Security*, 7-8
- omission in proxy login, (G) *User*, 19-7
- on OpenVMS Alpha, (G) *Compatibility*, 1-3
- open accounts and, (G) *User*, 2-7; (S) *Security*, 3-4
- password grabber programs, (S) *Security*, 3-14
- pre-expiring, (S) *Security*, 7-13
- primary, (G) *User*, 2-5, 2-6; (S) *Security*, 3-2, 3-4, 7-13
- protecting, (G) *User*, 2-17
- reason for changing, (G) *User*, 19-10; (S) *Security*, 3-17, 3-19
- receive, (S) *Security*, 12-16; (S) *DECnet Intro*, 3-21, 3-25, 3-34; (S) *DECnet Mgmt*, 2-29, 3-67
- restrictions, (G) *User*, 2-4; (S) *Security*, 3-2
- retries, (G) *User*, 2-12
- returning hash value, (P) *Sys Svc II*, SYS2-100
- reuse, (G) *User*, 2-3, 2-4; (S) *Security*, 3-1
- risky, (S) *Security*, 3-1
- routing initialization, (S) *Security*, 12-14; (S) *DECnet Mgmt*, 1-10, 2-16, 2-29, 3-67
- screening with site-specific filter, (S) *Security*, 7-22
- secondary, (G) *User*, 2-5, 2-17; (S) *Security*, 3-2, 7-15; (S) *Sys Mgr Essentials*, 11-4
 - advantages, (S) *Security*, 7-15
 - changing, (S) *Security*, 3-11
 - changing expired, (S) *Security*, 3-12
 - entering, (G) *User*, 2-6; (S) *Security*, 3-4
 - managing, (S) *Security*, 7-15
- secure, (G) *User*, 2-3
- secure choices for, (S) *Security*, 3-1
- secure terminal servers and, (S) *Security*, 3-14
- setting, (G) *DCL N-Z*, DCLI-177
- setting a new one, (G) *User*, 2-13
- setting at login, (G) *DCL A-M*, DCLI-410
- setting up VMScluster, (S) *VMScluster Sys*, 2-14
- sharing, (S) *Security*, 3-13, 12-20
- supplying during dialups, (G) *User*, 2-12
- system, (G) *User*, 2-5; (S) *Security*, 3-2, 3-3; (S) *Sys Mgr Essentials*, 11-3
 - causing login failures, (G) *User*, 2-11; (S) *Security*, 3-8
 - dictionary, (S) *Sys Mgr Essentials*, 11-2
 - disadvantages, (S) *Security*, 7-15
 - entering, (G) *User*, 2-5
 - guidelines, (S) *Security*, 7-14
 - minimum length requirement, (S) *Security*, 7-19
 - modifying, (S) *Security*, 7-15

Passwords

system (cont'd)

- recommended change frequency, (S) *Security*, 7-18
- setting up, (S) *Security*, 7-14
- system dictionary of, (S) *Security*, 3-2
- transmit, (S) *Security*, 12-16; (S) *DECnet Intro*, 3-21, 3-25; (S) *DECnet Mgmt*, 2-29, 3-67
- types, (S) *Security*, 3-2
- uniqueness for each account, (S) *Security*, 3-13
- user, (G) *User*, 2-4; (G) *SW Overview*, 5-1; (S) *Security*, 2-3, 3-2
- user guidelines, (S) *Security*, 3-1
- verifying change of, (G) *User*, 2-13; (S) *Security*, 3-10
- VMScluster membership management, (S) *VMScluster Sys*, 2-14
 - when account is created, (S) *Security*, 3-2
 - when forgotten prevents you from logging in, (S) *Sys Mgr Essentials*, 4-10
 - when to change, (S) *Security*, 3-2
 - with SYSMAN, (S) *Sys Mgr Essentials*, 2-16
- Pasteboards, (P) *Concepts*, 7-9; (P) *SMG\$*, 1-4; (P) *Debugger*, 11-3
 - creating, (P) *Concepts*, 7-9
 - deleting, (P) *Concepts*, 7-9, 7-10
 - ID, (P) *Concepts*, 7-31
 - sharing, (P) *Concepts*, 7-31
- Paste buffers, (S) *Sys Mgmt Util A-L*, A-5
- PASTHRU mode, (P) *I/O User*, 5-9, 5-11, 5-26, 5-28
- PATCH command, (G) *Compatibility*, A-2
 - See also Patch utility
- Patch text records
 - analyzing, (G) *DCL A-M*, DCLI-23
- Patch utility (PATCH), (G) *SW Overview*, 4-8; (G) *Compatibility*, 1-7, 1-9; (P) *Environment*, 11-1
 - Refer also to the *OpenVMS VAX Patch Utility Manual*
 - not supported on Alpha systems, (S) *Comparison*, 3-10
- Path blocks
 - See PBs
- Path control parameters, (S) *DECnet Mgmt*, 3-52
 - for areas, (S) *DECnet Mgmt*, 3-54
- Path names
 - abbreviating, (P) *Debugger*, 9-9
 - numeric, (P) *Debugger*, 9-9
 - relation to symbol, (P) *Debugger*, 9-8
 - syntax, (P) *Debugger*, 9-8
 - to specify scope, (P) *Debugger*, 3-23, 7-7, 9-7, 9-8
- Paths
 - cost, (S) *DECnet Mgmt*, 2-21
 - definition, (S) *DECnet Mgmt*, 2-21
 - length, (S) *DECnet Mgmt*, 2-21

Paths (cont'd)

- lost connection, (S) *DECnet Intro*, 3-4, 4-11
- low-cost, (S) *DECnet Intro*, 1-3
- routing, (S) *DECnet Intro*, 1-2
- PATHWORKS, (S) *TCP/IP*, 1-4; (P)
 - Environment*, 1-4
 - backup, (G) *SW Overview*, 6-23
 - client/server environment, (G) *SW Overview*, 2-7; (P) *Environment*, 3-2
 - clients, (G) *SW Overview*, 6-18
 - environments, (G) *SW Overview*, 6-18
 - eXcursion for Windows product, (G) *SW Overview*, 6-23
 - Macintosh clients, (G) *SW Overview*, 2-8; (P) *Environment*, 3-3
 - network connectivity, (G) *SW Overview*, 1-6
 - networking connections to Macintosh clients, (G) *SW Overview*, 6-24
 - networking connections to PC clients, (G) *SW Overview*, 6-24
 - network management, (G) *SW Overview*, 6-24
 - network transports, (G) *SW Overview*, 1-9, 6-18, 6-24
 - OpenVMS management servers, (G) *SW Overview*, 6-23
 - OpenVMS servers, (G) *SW Overview*, 1-11, 2-8, 6-20; (P) *Environment*, 3-3
 - PC clients, (G) *SW Overview*, 1-11, 2-8, 6-18; (P) *Environment*, 3-3
 - products, (G) *SW Overview*, 6-18
 - servers, (G) *SW Overview*, 6-18
 - startup restrictions, (S) *Sys Mgr Tuning*, 23-12
 - terminal emulation, (G) *SW Overview*, 6-23
 - windowing services, (G) *SW Overview*, 6-23
- PATHWORKS V5 for OpenVMS (LAN Manager), (G) *SW Overview*, 6-18
- Pattern tests, (S) *DECnet Mgmt Util*, 4-7, 4-12
- Paused queue status, (S) *Sys Mgr Essentials*, 13-51
- Pause program execution, (P) *LIB\$*, LIB-331
- Pausing an output queue, (S) *Sys Mgr Essentials*, 13-75
 - to align position of print for preprinted form, (S) *Sys Mgr Essentials*, 13-75, 13-77
 - to change position of print, (S) *Sys Mgr Essentials*, 13-75
- Pausing queues, (G) *DCL N-Z*, DCLII-388
- Pausing queue status, (S) *Sys Mgr Essentials*, 13-51
- PBs (path blocks), (P) *Alpha SDA*, SDA-94; (P) *VAX SDA*, SDA-105
- PCA, (G) *SW Overview*, 6-15, 7-5; (P) *Environment*, 9-11
 - See also Performance and Coverage Analyzer
- PCA performance testing, (S) *Dependable*, 8-59
- PCBB register, (P) *Alpha SDA*, SDA-16
 - displaying, (P) *Alpha SDA*, SDA-87; (P) *VAX SDA*, SDA-96

- PCBB symbol, (P) *Alpha SDA*, SDA-16
- /PCB qualifier, (P) *Alpha SDA*, SDA-128; (P) *VAX SDA*, SDA-149
- PCBs (process control blocks), (P) *Alpha SDA*, SDA-16, SDA-156; (P) *VAX SDA*, SDA-180
 - displaying, (P) *Alpha SDA*, SDA-128; (P) *VAX SDA*, SDA-149, SDA-150
 - hardware, (P) *Alpha SDA*, SDA-130; (P) *VAX SDA*, SDA-152
 - specifying the address of, (P) *Alpha SDA*, SDA-72, SDA-127
- PCB symbol, (P) *Alpha SDA*, SDA-16; (P) *VAX SDA*, SDA-18
- %PC built-in symbol
 - See PC symbol
- PCF (product configuration file), (S) *Sys Mgr Essentials*, 3-20
 - command to create, (S) *Sys Mgr Essentials*, 3-23
 - command to input, (S) *Sys Mgr Essentials*, 3-30
 - command to output, (S) *Sys Mgr Essentials*, 3-30
 - creating before installation, (S) *Sys Mgr Essentials*, 3-22
 - creating during installation, (S) *Sys Mgr Essentials*, 3-30
 - naming, (S) *Sys Mgr Essentials*, 3-23
 - use existing, (S) *Sys Mgr Essentials*, 3-30
- PCs
 - See Personal computers
- PCs (program counters), (S) *DECams*, 3-21
- PCs (program counters), (P) *Alpha SDA*, SDA-15; (P) *VAX SDA*, SDA-18
 - built-in symbol (%PC), (P) *Debugger*, 8-22, B-4
 - content of, (P) *Debugger*, 6-5, 8-19
- EXAMINE/INSTRUCTION command, (P) *Debugger*, 11-9, 11-17
- EXAMINE/OPERANDS command, (P) *Debugger*, 8-19, 15-9
- EXAMINE/SOURCE command, (P) *Debugger*, 10-4, 11-6, 11-18, 11-21
- examining, (P) *Debugger*, 8-19, 15-9
 - in a crash dump, (P) *Alpha SDA*, SDA-18; (P) *VAX SDA*, SDA-19
- scope, (P) *Debugger*, 3-23, 9-7
- SHOW CALLS display, (P) *Debugger*, 6-7
- PCSI\$CONFIGURATION, (S) *Sys Mgr Essentials*, 3-23
- PC symbol, (P) *Alpha SDA*, SDA-15; (P) *VAX SDA*, SDA-18
- PDFs (product description files), (S) *Sys Mgr Essentials*, 3-20
- /PD qualifier, (P) *Alpha SDA*, SDA-49

- PDSCs (procedure descriptors), (*P*) *Calling Std*, 3-3
 - for bound procedures, (*P*) *Calling Std*, 3-42
 - for null frame procedures, (*P*) *Calling Std*, 3-20
 - for register frame procedures, (*P*) *Calling Std*, 3-15
 - stack frame procedures, (*P*) *Calling Std*, 3-5
- PDT (port descriptor table), (*P*) *Alpha SDA*, SDA-124; (*P*) *VAX SDA*, SDA-141
- PDT symbol, (*P*) *VAX SDA*, SDA-18
- PEDRIVER port driver
 - communications for LANs, (*S*) *VMScluster Sys*, 1-6
 - congestion control, (*S*) *VMScluster Sys*, G-1
 - HELLO multicasts, (*S*) *VMScluster Sys*, G-2
 - implementing the NISCA protocol, (*S*) *VMScluster Sys*, F-4
 - preferred channel, (*S*) *VMScluster Sys*, G-3
 - retransmission, (*S*) *VMScluster Sys*, F-20
 - SDA monitoring, (*S*) *VMScluster Sys*, F-13
- Pending bad block log file, (*P*) *File Appl*, 1-8
- BADLOG.SYS, (*S*) *Sys Mgr Tuning*, A-9
- reserved file, (*S*) *Sys Mgr Tuning*, A-9
- Pending jobs
 - requeuing, (*S*) *Sys Mgr Essentials*, 13-73
 - troubleshooting, (*S*) *Sys Mgr Essentials*, 13-79
- Pending job status
 - definition, (*S*) *Sys Mgr Essentials*, 13-69
 - deleting a job in, (*S*) *Sys Mgr Essentials*, 13-74
 - determining whether a job is in, (*S*) *Sys Mgr Essentials*, 13-79
 - inducing with STOP/QUEUE/REQUEUE command, (*S*) *Sys Mgr Essentials*, 13-73
 - requeuing a job in, (*S*) *Sys Mgr Essentials*, 13-73
- People-proof covers, (*S*) *Dependable*, 5-7
- Percent sign (%)
 - See also Asterisk (*)
 - as switchhook character in Phone, (*G*) *User*, 7-3
 - as wildcard character, (*G*) *User*, 4-10
 - using with tape volumes, (*S*) *Sys Mgr Essentials*, 9-16
- Performance, (*P*) *File Appl*, 3-1, 9-7 to 9-9
 - See also Tuning
 - ACL length and, (*S*) *Security*, 8-4
 - application software and dependable computing, (*S*) *Dependable*, 4-13
 - data transfer rates, (*G*) *V6.2 New Feat*, 7-6
 - deferred-write option, (*P*) *File Appl*, 3-28
 - diagnostic strategy, (*S*) *VAX Perform*, 4-1
 - overview, (*S*) *Alpha Perform*, 12-1
 - disk, (*S*) *Sys Mgr Essentials*, 8-28
 - displaying availability and use of resources, (*G*) *DCL N-Z*, DCLII-298
 - effect of compression, (*P*) *File Appl*, 3-20
- Performance (cont'd)
 - effect of file extension on, (*S*) *Sys Mgr Tuning*, 16-7
 - highwater marking and, (*S*) *Security*, 8-29
 - I/O in VMScluster, (*P*) *File Appl*, 3-33
 - importance of correct page file size, (*S*) *Sys Mgr Tuning*, 15-8
 - importance of correct swap file size, (*S*) *Sys Mgr Tuning*, 15-9
 - importance of sufficient hardware capacity, (*S*) *Sys Mgr Tuning*, 16-6
 - improving
 - decompressing system libraries, (*S*) *Sys Mgr Tuning*, 16-6
 - designing efficient applications, (*S*) *Sys Mgr Tuning*, 16-4
 - disabling high-water marking, (*S*) *Sys Mgr Tuning*, 16-7
 - encouraging batch processing, (*S*) *Sys Mgr Tuning*, 16-4
 - for vector processing with batch queues, (*S*) *Sys Mgr Tuning*, 26-7
 - installing frequently used images, (*S*) *Sys Mgr Tuning*, 16-7, 16-9
 - moving page and swap files off system disk, (*S*) *Sys Mgr Tuning*, 15-5
 - options for, (*S*) *Sys Mgr Tuning*, 16-6
 - reducing system disk I/O, (*S*) *Sys Mgr Tuning*, 16-8
 - relinking images, (*S*) *Sys Mgr Tuning*, 16-7
 - restricting the number of interactive users, (*S*) *Sys Mgr Tuning*, 16-4
 - restricting user login hours, (*S*) *Sys Mgr Tuning*, 16-4
 - setting RMS file extend parameters, (*S*) *Sys Mgr Tuning*, 16-7
 - slicing shareable images, (*S*) *Sys Mgr Tuning*, 16-12
 - tuning the system, (*S*) *Sys Mgr Tuning*, 16-4
 - with AUTOGEN feedback, (*S*) *Sys Mgr Tuning*, 14-10
 - improving I/O with DECram, (*G*) *SW Overview*, 7-8
 - improving with null keys, (*P*) *File Appl*, 3-22
 - improving with SHR argument, (*P*) *RMS Ref*, A-25
 - in a VMScluster, (*P*) *File Appl*, 3-32
 - information database, (*S*) *Alpha Perform*, 7-7
 - linker image optimizations, (*P*) *Linker*, 1-3
 - load balancing on public volumes, (*S*) *Sys Mgr Essentials*, 8-9
 - maintaining system, (*G*) *SW Overview*, 3-11
 - management
 - definition, (*S*) *Alpha Perform*, 1-1
 - information database, (*S*) *Alpha Perform*, 7-7

Performance

management (cont'd)

- strategy, (S) *Alpha Perform*, 1-4
- utilities, (S) *Alpha Perform*, 1-3
- work load, (S) *Alpha Perform*, 1-3
- management tools, (G) *SW Overview*, 7-9
- monitoring, (S) *Sys Mgr Tuning*, 16-2
 - tools used for, (S) *Sys Mgr Tuning*, 16-2
- monitoring and tuning, (G) *SW Overview*, 2-15, 3-10
- network consulting from Digital, (S) *Dependable*, 10-7
- of system and personnel, (S) *Dependable*, 4-13 to 4-14
- of translated images, (G) *Compatibility*, 4-6
- of vector processing, (S) *Sys Mgr Tuning*, 26-4
- operating systems and dependable computing environments, (S) *Dependable*, 4-12
- optimizing, (P) *Linker*, 1-3, 1-15
- optimizing by customizing data collection, (S) *DECams*, 5-14
- recommendations for a VMScluster environment, (P) *File Appl*, 3-33
- SCSI storage, (G) *V6.2 New Feat*, 7-6
- security-auditing impact, (S) *Security*, 9-12
- testing for disks, (S) *Sys Mgr Essentials*, 8-8
- tradeoffs
 - in dependable computing environments, (S) *Dependable*, 4-3 to 4-5
 - network level, (S) *Dependable*, 4-11
 - using Prolog 3, (P) *File Appl*, 3-20
 - virtual I/O cache, (G) *SW Overview*, 3-11
- Performance analysis, (P) *Modular Proc*, 4-8
- Performance and Coverage Analyzer (PCA)
 - alignment, (P) *Concepts*, 22-3
- Performance complaints
 - evaluating, (S) *VAX Perform*, 1-5
 - traced to hardware problems, (S) *VAX Perform*, 1-6
 - traced to MWAIT state, (S) *VAX Perform*, 1-6
 - traced to unrealistic expectations, (S) *VAX Perform*, 1-7
- Performance management, (S) *Sys Mgr Tuning*, 16-1
 - approaching as management of resources, (S) *VAX Perform*, 3-1
 - choosing a workload management strategy, (S) *Sys Mgr Tuning*, 16-3
 - considering hardware capacity, (S) *Sys Mgr Tuning*, 16-6
 - definition, (S) *VAX Perform*, 1-1
 - distributing work load, (S) *Sys Mgr Tuning*, 16-4
 - evaluating tuning success, (S) *Sys Mgr Tuning*, 16-6
 - installing images, (S) *Sys Mgr Tuning*, 16-9
 - knowing your work load, (S) *Sys Mgr Tuning*, 16-2

Performance management (cont'd)

- options for, (S) *Sys Mgr Tuning*, 16-6
- system tuning, (S) *Sys Mgr Tuning*, 16-4
- tasks, (S) *Sys Mgr Tuning*, 16-1
- using MONITOR, (S) *Sys Mgr Tuning*, 18-39
- with vector processing, (S) *Sys Mgr Tuning*, 26-7
- Performance measurement routine, (P) *Concepts*, 6-17
- Performance optimization tasks
 - Alpha images
 - installing resident, (S) *Comparison*, 2-26, 5-13
 - Alpha programming considerations, (S) *Comparison*, A-1 to A-3
 - differences on Alpha and VAX systems, (S) *Comparison*, 5-1
 - adaptive pool management, (S) *Comparison*, 5-11
 - improving performance of images, (S) *Comparison*, 5-13
 - tuning impact of larger page size, (S) *Comparison*, 5-1
 - virtual I/O cache, (S) *Comparison*, 5-17
- Performance requirements, (G) *V6.2 New Feat*, 8-10
- Period (.)
 - contents-of operator, (P) *Debugger*, 8-6, 8-19, B-8
 - current entity, (P) *Debugger*, 8-8, 8-13, B-6
- Periodically waking processes, (S) *Alpha Perform*, 6-14
- watchdog, (S) *Alpha Perform*, 6-14
- Permanent databases, (S) *DECnet Mgmt*, 1-13, 3-2, 5-34
 - considerations, (S) *DECnet Mgmt*, 5-34
 - copying node entries, (S) *DECnet Mgmt*, 3-18
 - copying using DCL COPY command, (S) *DECnet Mgmt*, 3-21
 - network, (S) *Sys Mgr Tuning*, 21-11; (S) *DECnet Intro*, 3-10, 3-11, 3-18
 - proxy, (S) *DECnet Intro*, 3-35
- Permanent mailboxes
 - See Mailboxes
- Per-process common areas, (P) *Concepts*, 2-6
- Persona
 - assuming, (G) *V6.2 New Feat*, 4-7
 - creating, (G) *V6.2 New Feat*, 4-9
 - deleting, (G) *V6.2 New Feat*, 4-10
- Personal computers
 - connection to network, (S) *DECnet Intro*, 1-6, 3-27
 - serving corporate data to PCs, (S) *Dependable*, 3-5
- Personal login command procedures, (G) *User*, 15-45
 - in captive accounts, (G) *User*, 15-46

- Personnel
- analyzing options, (S) *Dependable*, 3-15 to 3-16
 - building block, (S) *Dependable*, 1-15 to 1-16
 - cross training, (S) *Dependable*, 1-4, 5-7
 - at CSC data center, (S) *Dependable*, 11-6
 - Digital consulting support packages, (S) *Dependable*, 10-1
 - environment, (S) *Dependable*, 5-5
 - role boundaries, (S) *Dependable*, 5-7
 - sensitive treatment of, (S) *Dependable*, 3-16, 11-6, 11-9
 - staffing tradeoffs, (S) *Dependable*, 4-14
 - training and testing, (S) *Dependable*, 3-12
 - training programmers, (S) *Dependable*, 3-10
 - Personnel productivity, (S) *Dependable*, 4-13 to 4-14
 - Per-thread context, (P) *DECthreads*, 2-14
 - generating key value for, (P) *DECthreads*, pthread-49, cma-45
 - obtaining, (P) *DECthreads*, pthread-46, cma-47
 - setting, (P) *DECthreads*, pthread-74, cma-48
 - uses for, (P) *DECthreads*, pthread-49, cma-45
 - using to avoid nonreentrant software, (P) *DECthreads*, 3-4
 - PEXlib, (P) *Environment*, 2-6
 - PEX protocol, (P) *Environment*, 2-6
 - PFCDEFAULT system parameter
 - overriding default value, (P) *Linker*, LINK-47
 - PFMGBL privilege, (S) *Security*, 5-15
 - PFN (page frame number), (P) *Concepts*, 19-5
 - PFN database, (P) *Alpha SDA*, SDA-114, SDA-116; (P) *VAX SDA*, SDA-127
 - displaying, (P) *Alpha SDA*, SDA-116; (P) *VAX SDA*, SDA-131
 - PFNMAP privilege, (S) *Security*, 5-15, A-12
 - PFRATH system parameter
 - page faulting, (S) *VAX Perform*, 2-7, 3-5
 - PFRATL system parameter
 - page faulting, (S) *VAX Perform*, 2-7
 - PGFIPLHI bugcheck, (P) *Alpha SDA*, SDA-27; (P) *VAX SDA*, SDA-23
 - PGFLQUOTA process limit, (S) *Sys Mgr Essentials*, 6-43
 - limiting page file usage with, (S) *Sys Mgr Tuning*, 15-9
 - minimum recommended value, (S) *Sys Mgr Tuning*, 15-9
 - value for efficient backups, (S) *Sys Mgr Essentials*, 10-10
 - Phase III nodes, (S) *DECnet Mgmt*, 2-16
 - Phase II nodes, (S) *DECnet Mgmt*, 2-16
 - Phase IV nodes, (S) *DECnet Mgmt*, 2-16
 - end node, (S) *DECnet Mgmt*, 2-17
 - node address, (S) *DECnet Mgmt*, 2-18
 - router, (S) *DECnet Mgmt*, 2-17
 - /PHD qualifier, (P) *Alpha SDA*, SDA-128; (P) *VAX SDA*, SDA-149
 - PHDs (process headers), (P) *Alpha SDA*, SDA-156; (P) *VAX SDA*, SDA-180
 - displaying, (P) *Alpha SDA*, SDA-128; (P) *VAX SDA*, SDA-149
 - PHD symbol, (P) *Alpha SDA*, SDA-16; (P) *VAX SDA*, SDA-18
 - PHIGS, (G) *SW Overview*, 6-16; (P) *Environment*, 2-6
 - PHONE\$SERVER account
 - enabling default access, (S) *DECnet Mgmt*, 2-26, 5-3, 5-6
 - PHONE (Phone utility)
 - See Phone utility
 - PHONE command, (G) *DCL N-Z*, DCLII-12
 - in network operations, (S) *DECnet Intro*, 2-11
 - using over the network, (S) *DECnet Intro*, 2-10
 - PHONE objects, (S) *DECnet Mgmt*, 2-6, 2-26, 3-60
 - PHONE\$SERVER account
 - default access, (S) *DECnet Mgmt*, 5-3, 5-6
 - Phone utility (PHONE)
 - commands, (G) *User*, 7-4
 - default access account, (S) *DECnet Intro*, 3-13
 - network operations, (S) *DECnet Intro*, 2-2, 2-10, 2-11, 4-11
 - qualifiers, (G) *User*, 7-3
 - switchhook character (%) in, (G) *User*, 7-3
 - Physical addresses, (S) *DECnet Mgmt*, 1-6; (S) *DECnet Mgmt Util*, 1-9, 1-10
 - PHYSICAL ADDRESS parameter
 - for LOOP CIRCUIT command, (S) *DECnet Mgmt*, 7-9
 - for TRIGGER command, (S) *DECnet Mgmt*, 4-5
 - Physical dump, (S) *Sys Mgr Tuning*, 15-3
 - compared to selective dump, (S) *Sys Mgr Tuning*, 15-3, 15-10
 - Physical I/O access, (S) *Security*, 5-4
 - Physical I/Os
 - access checks, (P) *Concepts*, 9-6
 - operations, (P) *Concepts*, 9-5
 - privilege, (P) *Concepts*, 9-3, 9-5, 9-6
 - Physical Interconnect protocol
 - See PI protocol
 - Physical memory, (S) *Alpha Perform*, 5-2
 - Physical mode, (S) *Sys Mgmt Util A-L*, 7-49
 - Physical names, (P) *Concepts*, 9-26
 - Physical Network, (S) *TCP/IP*, 2-3
 - PHYSICALPAGES system parameter, (S) *Comparison*, 2-15
 - /PHYSICAL qualifier, (P) *Alpha SDA*, SDA-49
 - in Backup utility, (S) *Sys Mgmt Util A-L*, 7-49
 - Physical security, (S) *Security*, 1-3
 - C2 systems and, (S) *Security*, C-6
 - encrypting files, (S) *Security*, 8-27

- Physical security (cont'd)
 - restricting system access, (S) *Security*, 8-1
 - violation indicators, (S) *Security*, 10-2
 - when logging out, (S) *Security*, 3-19
- PHYSICAL_MEMORY system parameter, (S)
 - Comparison*, 2-15
- PHY_IO privilege, (S) *Security*, 5-7, A-12
- PID (process identifier), (S) *DECamsds*, 3-5
 - CPU, (S) *DECamsds*, 3-3
 - I/O, (S) *DECamsds*, 3-17
 - memory, (S) *DECamsds*, 3-11
 - single process, (S) *DECamsds*, 3-21
- PID numbers, (G) *User*, C-12; (P) *Concepts*, 3-3, 3-5; (P) *Alpha SDA*, SDA-128
 - and process context, (G) *User*, 18-2
 - definition, (P) *Concepts*, 3-5, 3-8
 - obtaining using F\$PID lexical function, (G) *User*, 17-7
 - referencing remote processes, (P) *Concepts*, 3-8
 - SDA uses to extract correct index, (P) *VAX SDA*, SDA-148
 - using with \$GETJPI to return information about a process, (P) *Sys Svc I*, SYS1-346
- PIDRIVER port driver
 - communications for DSSI, (S) *VMScluster Sys*, 1-6
- PIO (paging I/O), (S) *DECamsds*, 3-24
 - rate, (S) *DECamsds*, 3-17
- Pipeline quotas, (S) *DECnet Mgmt*, 2-24, 3-58; (S) *DECnet Mgmt Util*, 3-69
- Pipelining model, (P) *DECthreads*, 1-6
- PI protocol
 - part of the SCA architecture, (S) *VMScluster Sys*, F-3
- PIXELVISION, (P) *Environment*, 2-6
- PL/I, (G) *Compatibility*, 1-10; (P) *Environment*, 7-3, 7-10
 - data type declarations, (P) *Interfaces*, B-43
 - DEC PL/I for OpenVMS Alpha, (G) *SW Overview*, 4-6
 - implementation table, (P) *Interfaces*, B-43
 - VAX PL/I, (G) *SW Overview*, 4-6
- Placement of extends, (P) *File Appl*, 3-8
- Planning system requirements for dependability, (S) *Dependable*, 2-1
- Platforms
 - Alpha, (G) *SW Overview*, 1-3
 - VAX, (G) *SW Overview*, 1-3
- Playback mode
 - See *Monitor utility*
- PLV (privileged library vector), (P) *Linker*, 4-11
- PMAD Ethernet device, (S) *DECnet Mgmt*, 2-10
- PMT option, (P) *Rec Mgmt Util*, 4-13
- PNDRIVER port driver
 - communications for CI, (S) *VMScluster Sys*, 1-6
- Pointer retrieval, (P) *File Appl*, 9-7
- Pointer types, (P) *Debugger*, 3-19, 8-18
- Point-to-point circuits, (S) *DECnet Mgmt*, 2-6
- Point-to-point configurations, (S) *DECnet Mgmt*, 1-3, 1-8, 5-23
- Point-to-point connections
 - security, (S) *DECnet Mgmt*, 2-36, 3-67
- Point-to-point DDCMP addressing, (S) *DECnet Mgmt*, 3-25
- Point-to-point lines, (S) *DECnet Mgmt*, 2-12
- Policies regarding system privileges, (S) *Dependable*, 3-14
- Polling, (S) *DECnet Mgmt*, 1-8, 2-8
 - LAN, (S) *DECamsds*, 5-15
- POLYCENTER Accounting Chargeback, (G) *SW Overview*, 7-5
- POLYCENTER Capacity Planner, (G) *SW Overview*, 7-5, 7-9
- POLYCENTER Framework, (G) *SW Overview*, 2-16, 6-17
- POLYCENTER HSM for OpenVMS, (G) *SW Overview*, 7-5
 - file shelving, (G) *SW Overview*, 2-14, 7-8
- POLYCENTER management products, (G) *SW Overview*, 2-16, 6-16
- POLYCENTER Performance Advisor, (G) *SW Overview*, 7-6, 7-9
- POLYCENTER Performance Data Collector, (G) *SW Overview*, 7-9
- POLYCENTER Performance Solution, (G) *SW Overview*, 2-15, 7-9
 - capacity planner, (S) *VMScluster Sys*, 1-8
 - chargeback accounting, (S) *VMScluster Sys*, 1-8
 - data collector, (S) *VMScluster Sys*, 1-9
 - performance advisor, (S) *VMScluster Sys*, 1-10
- POLYCENTER Scheduler, (G) *SW Overview*, 7-6, 7-10
- POLYCENTER Software Distribution Manager, (G) *SW Overview*, 2-16, 7-7
- POLYCENTER Software Installation utility, (G) *SW Overview*, 3-7, 7-7; (G) *Compatibility*, 1-5; (S) *Sys Mgr Essentials*, 3-18
 - commands and operations, (S) *Sys Mgr Essentials*, 3-19
 - creating a PCF, (S) *Sys Mgr Essentials*, 3-22
 - databases, (S) *Sys Mgr Essentials*, 3-20
 - DCL interface, (S) *Sys Mgr Essentials*, 3-18
 - DECwindows Motif interface, (S) *Sys Mgr Essentials*, 3-18
 - exiting from DECwindows Motif, (S) *Sys Mgr Essentials*, 3-35
 - getting help, (S) *Sys Mgr Essentials*, 3-35
 - installing layered products, (S) *Sys Mgr Essentials*, 3-6
 - installing software, (S) *Sys Mgr Essentials*, 3-27

- POLYCENTER Software Installation utility (cont'd)
- installing the OpenVMS Alpha operating system, (S) *Sys Mgr Essentials*, 3-2
 - interfaces to use, (S) *Sys Mgr Essentials*, 3-18
 - managing installed software, (S) *Sys Mgr Essentials*, 3-34
 - preliminary steps, (S) *Sys Mgr Essentials*, 3-28
 - PRODUCT command to run, (S) *Sys Mgr Essentials*, 3-18
 - product configuration files, (S) *Sys Mgr Essentials*, 3-20
 - registering products, (S) *Sys Mgr Essentials*, 3-27
 - registering volume labels, (S) *Sys Mgr Essentials*, 3-33
 - removing installed products, (S) *Sys Mgr Essentials*, 3-34
 - starting the utility, (S) *Sys Mgr Essentials*, 3-18
 - upgrading the OpenVMS Alpha operating system, (S) *Sys Mgr Essentials*, 3-2
 - using a product database, (S) *Sys Mgr Essentials*, 3-26
 - using to add or delete optional system files, (S) *Sys Mgr Essentials*, 5-2
- POLYCENTER Software Installation utility (PRODUCT), (S) *Sys Mgmt Util M-Z*, 3-3
- See also PRODUCT command
- commands, (S) *Sys Mgmt Util M-Z*, 3-5
 - invoking, (S) *Sys Mgmt Util M-Z*, 3-4
- POLYCENTER System Watchdog, (G) *SW Overview*, 7-6, 7-10
- POOLCHECK system parameter, (S) *Comparison*, 2-15; (S) *VAX Perform*, 3-28; (S) *Alpha Perform*, 10-9
- Pooled resource, (S) *Sys Mgr Essentials*, 6-3
- Pool lists
- displaying contents, (P) *VAX SDA*, SDA-134
 - statistics about, (P) *VAX SDA*, SDA-135
- Pool management, (S) *Alpha Perform*, 10-9 to 10-10
- See also Adaptive pool management
- paged dynamic, (S) *Alpha Perform*, 6-18
- Portability
- application, (G) *SW Overview*, 2-3; (P) *Environment*, 2-1
 - developing programs, (G) *SW Overview*, 4-3
 - POSIX applications, (G) *SW Overview*, 2-4, 4-3, 4-12; (P) *Environment*, 2-2, 2-4
 - user, (G) *SW Overview*, 2-5, 5-1
 - using SQL in applications, (G) *SW Overview*, 2-4; (P) *Environment*, 2-5
- Portable applications, (G) *SW Overview*, 3-4
- on VAX and Alpha platforms, (G) *SW Overview*, 1-13, 4-3
- Portable Character Set, (G) *V6.2 New Feat*, 5-42
- Port access mode, (P) *I/O User*, 2-9
- Port communications, (S) *VMScluster Sys*, 1-5, C-19
- Port descriptor tables
- See PDTs
- Port drivers, (S) *VMScluster Sys*, 1-5, C-19
- displaying SDA information, (P) *Alpha SDA*, SDA-80; (P) *VAX SDA*, SDA-86
 - error-log entries, (S) *VMScluster Sys*, C-27
- Porting checklist, (G) *Compatibility*, 4-2
- Port-queue functionality, (G) *V6.2 New Feat*, 4-11
- Ports, (S) *TCP/IP*, 2-5
- application, (S) *Sys Mgmt Util A-L*, 13-10, 13-35, 13-37, 13-52
 - characteristics, (S) *Sys Mgmt Util A-L*, 13-52
 - counters, (S) *Sys Mgmt Util A-L*, 13-52
 - creating with LATCP, (S) *Sys Mgmt Util A-L*, 13-9
 - dedicated, (S) *Sys Mgmt Util A-L*, 13-10, 13-36, 13-52
 - deleting with LATCP, (S) *Sys Mgmt Util A-L*, 13-20
 - displaying characteristics of, (S) *Sys Mgmt Util A-L*, 13-53
 - displaying information, (G) *DCL N-Z*, DCLII-350
 - displaying information using LATCP, (S) *Sys Mgmt Util A-L*, 13-52
 - displaying SDA information, (P) *Alpha SDA*, SDA-124; (P) *VAX SDA*, SDA-141
 - failures, (S) *VMScluster Sys*, C-20
 - limited, (S) *Sys Mgmt Util A-L*, 13-11, 13-36
 - logical name of, (S) *Sys Mgmt Util A-L*, 13-11
 - making connections from lines, (S) *DECnet Intro*, 3-4
 - modifying characteristics of with LATCP, (S) *Sys Mgmt Util A-L*, 13-35
 - name, (S) *Sys Mgmt Util A-L*, 13-35
 - outgoing connection, (S) *Sys Mgmt Util A-L*, 13-53
 - setting type of, (S) *Sys Mgmt Util A-L*, 13-10
 - setting up LAT, (S) *Sys Mgr Essentials*, 13-14
 - software controllable selection, (S) *VMScluster Sys*, 6-5
 - target, (S) *Sys Mgmt Util A-L*, 13-54
 - terminal, (S) *DECnet Intro*, 3-26
- Port selection, (P) *I/O User*, 2-9
- POSITION attribute, (P) *Rec Mgmt Util*, 4-7, 4-27, 4-28; (P) *File Appl*, 4-35
- Position of print
- aligning for preprinted forms, (S) *Sys Mgr Essentials*, 13-75, 13-77
 - changing, (S) *Sys Mgr Essentials*, 13-75, 13-76

Positive operator (+), (P) *Alpha SDA*, SDA-13;
(P) *VAX SDA*, SDA-16

POSIX

accessing the environment, (G) *SW Overview*,
5-2

application development utilities, (G) *SW
Overview*, 4-15

callable interfaces, (G) *SW Overview*, 4-15

commands, (G) *SW Overview*, 5-7

complex utilities, (G) *SW Overview*, 4-14

container file systems, (G) *SW Overview*, 5-10

ed utility, (G) *SW Overview*, 5-12

file commands and utilities, (G) *SW Overview*,
5-11

files, (G) *SW Overview*, 5-10

file specifications, (G) *SW Overview*, 5-10

in DCL environment, (G) *SW Overview*, 4-14

installation and management, (G) *SW
Overview*, 3-12

interactive interface, (G) *SW Overview*, 4-14

internationalization tools, (G) *SW Overview*,
4-16

OpenVMS environment, (G) *SW Overview*, 2-4,
3-4, 5-2

pipes, (G) *SW Overview*, 4-14

portable applications, (G) *SW Overview*, 2-4,
3-4, 4-3; (P) *Environment*, 2-2

programming, (G) *SW Overview*, 4-12, 4-14;
(P) *Environment*, 2-4

real-time functions, (G) *SW Overview*, 4-16;
(P) *Environment*, 2-5

real-time interprocess communication, (G) *SW
Overview*, 3-3

shell, (G) *SW Overview*, 2-5, 4-14, 5-7

sigwait service, (P) *DECthreads*, A-6

standards, (G) *SW Overview*, 2-3, 5-2, A-1

support of XPG3 BASE specifications, (G) *SW
Overview*, 4-16

system services, (G) *SW Overview*, 4-14; (P)
Environment, 2-4

use of ANSI C language, (P) *Environment*, 2-4

using ISO C language, (G) *SW Overview*, 4-14

using OpenVMS capabilities, (G) *SW Overview*,
4-13

using RMS files, (G) *SW Overview*, 4-19

utilities, (G) *SW Overview*, 2-5

vi editor, (G) *SW Overview*, 5-12

POS option, (P) *Rec Mgmt Util*, 4-20

PostScript output converter, (G) *DCL A-M*,
DCLI-69

processing options, (G) *DCL A-M*, DCLI-72

PostScript printing, (S) *Sys Mgr Essentials*, 13-9

Power

electrical, (S) *Dependable*, 5-1

Power recovery

setting AST for, (P) *Sys Svc II*, SYS2-252

pow routine, (P) *Portable Math*, DPML-47, B-11

PPC protocol

part of NISCA transport protocol, (S)
VMScluster Sys, F-3

PPD level

part of PPD protocol, (S) *VMScluster Sys*, F-3

PPD protocol

part of SCA architecture, (S) *VMScluster Sys*,
F-3

PPL\$ routines, (P) *Concepts*, 14-27

PPL\$SPAWN routine, (P) *Concepts*, 14-27

PPP (Point-to-Point protocol), (S) *TCP/IP*, 2-7

PQL system parameters with changed default
values on Alpha systems, (S) *Comparison*,
5-3 to 5-4

PQL_DWSDEFAULT parameter, (S) *Alpha
Perform*, 6-2

PQL_DWSEXTENT parameter, (S) *Alpha
Perform*, 6-2

PQL_DWSQUOTA parameter, (S) *Alpha Perform*,
6-2

PRBR register

displaying, (P) *Alpha SDA*, SDA-87

PRBR symbol, (P) *Alpha SDA*, SDA-16

PRCLM (Process limit)

job quotas in use, (S) *DECams*, 3-25

PRCLM process limit, (S) *Sys Mgr Essentials*,
6-43

Precedence operators, (P) *Alpha SDA*, SDA-13
parentheses used as, (P) *VAX SDA*, SDA-17

Predecessor

See Logical predecessor

Predefined logical name

LN\$FILE_DEV, (P) *Concepts*, 10-14

Predictive sizing

consulting from Digital, (S) *Dependable*, 10-1

Preferred channels, (S) *VMScluster Sys*, G-3

Preferred path specification, (S) *VMScluster Sys*,
6-5

Prefix list

displaying on Alpha systems, (S) *Sys Mgmt
Util M-Z*, 6-42

setting on Alpha systems, (S) *Sys Mgmt Util
M-Z*, 6-39

Preparing for installation, (S) *DECams*, A-1

Preserving character case, (S) *TCP/IP*, 5-2

Preventing autostart queues from starting, (S)
Sys Mgr Essentials, 13-54

%PREVIOUS_PROCESS built-in symbol, (P)
Debugger, 14-11

%PREVIOUS_SCOPE_ENTRY built-in symbol,
(P) *Debugger*, B-11

%PREVIOUS_TASK built-in symbol, (P)
Debugger, 16-15

- %PREVLOC built-in symbol, (P) *Debugger*, 8-8, 8-13, B-6
- Primary attributes, (P) *Rec Mgmt Util*, 4-1; (P) *File Appl*, 4-9
- Primary bootstrap image
 - definition, (S) *Sys Mgr Essentials*, 4-17
 - role in boot process, (S) *Sys Mgr Essentials*, 4-2
- Primary data record, (P) *Rec Mgmt Util*, 1-3
- PRIMARY day
 - defining for accounts, (S) *Sys Mgr Essentials*, 6-27
- Primary dependability strategies
 - concepts, (S) *Dependable*, 1-10
- Primary exception vector, (P) *Concepts*, 13-24
- Primary handler, (P) *Debugger*, 13-13
- Primary index structure, (P) *Rec Mgmt Util*, 1-3
- Primary key, (P) *Rec Mgmt Util*, 2-12
- Primary loader, (S) *DECnet Mgmt*, 4-2
- Primary page cache, (S) *Alpha Perform*, 5-1, 5-2
- Primary page file, (S) *Sys Mgr Tuning*, 15-5
 - location requirement, (S) *Sys Mgr Tuning*, 16-8
- Primary processors, (S) *Sys Mgr Tuning*, 26-2
- Primary record structures, (P) *File Appl*, 10-18
- Primary sections
 - ordering requirement, (P) *Rec Mgmt Util*, 5-1
- Primary swap file, (S) *Sys Mgr Tuning*, 15-5
- Prime number search example, (P) *DECthreads*, 5-1
- PRIMITIVE_IO.EXE file
 - global symbols, (P) *VAX SDA*, SDA-65
- Principles of dependable systems, (S) *Dependable*, 2-1
 - See also Rules to remember for dependable computing
 - continuous improvement process, (S) *Dependable*, 2-1
 - determining requirements, (S) *Dependable*, 2-4
- PRINT carriage control, (P) *Rec Mgmt Util*, 2-3, 4-32
- PRINT command, (G) *User*, 4-16 to 4-19; (G) *DCL N-Z*, DCLII-13 to DCLII-24
 - bypassing symbiont formatting, (S) *Sys Mgr Essentials*, 13-44
 - files, (G) *DCL N-Z*, DCLII-13
 - in Mail, (G) *User*, 6-16
 - overriding default form-feed options with, (S) *Sys Mgr Essentials*, 13-44
 - preventing users from executing, (S) *Sys Mgr Essentials*, 13-53
 - procedure in batch job log, (G) *DCL N-Z*, DCLII-232
 - processing of, (S) *Sys Mgr Essentials*, 13-2
 - specifying a form, (S) *Sys Mgr Essentials*, 13-42
 - specifying banner pages, (S) *Sys Mgr Essentials*, 13-60
- PRINT command (cont'd)
 - specifying characteristics, (S) *Sys Mgr Essentials*, 13-28
 - specifying job retention, (S) *Sys Mgr Essentials*, 13-74
 - specifying scheduling priority, (S) *Sys Mgr Essentials*, 13-72
 - specifying setup and page setup modules, (S) *Sys Mgr Essentials*, 13-67
- Printer device widths, (P) *Concepts*, 7-6
- Printer paper
 - controlling with forms, (S) *Sys Mgr Essentials*, 13-42, 13-64
 - pausing to align, (S) *Sys Mgr Essentials*, 13-75
 - sheet feed, (S) *Sys Mgr Essentials*, 13-62
 - specifying stock, (S) *Sys Mgr Essentials*, 13-62
 - specifying width, (S) *Sys Mgr Essentials*, 13-61
- Printers
 - C2 systems and, (S) *Security*, C-9
 - configuring in a LAT environment, (S) *Sys Mgmt Util A-L*, 13-10, 13-35
 - controlling functions of, (S) *Sys Mgr Essentials*, 13-44
 - default security elements, (S) *Security*, 5-6
 - LAT
 - See LAT software, printers
 - managing
 - tasks for, (S) *Sys Mgr Essentials*, 7-13
 - setting characteristics, (S) *Sys Mgr Essentials*, 7-13, 13-14
 - in system startup, (S) *Sys Mgr Essentials*, 5-12, 7-13
 - setting up, (S) *Sys Mgr Essentials*, 7-9
 - setting up before creating queues, (S) *Sys Mgr Essentials*, 13-14
 - spooled, (S) *Sys Mgr Essentials*, 13-14
 - definition, (S) *Sys Mgr Essentials*, 7-14
 - despooling, (S) *Sys Mgr Essentials*, 7-15
 - recommended use, (S) *Sys Mgr Essentials*, 7-14
 - requirement, (S) *Sys Mgr Essentials*, 7-13
 - sample configuration, (S) *Sys Mgr Essentials*, 13-13
 - spooling, (S) *Sys Mgr Essentials*, 7-14
 - testing spooling of, (S) *Sys Mgr Essentials*, 7-16
 - troubleshooting, (S) *Sys Mgr Essentials*, 13-78
- Print format options
 - See also FAB\$V_PRN option
 - for VFC records with 2-byte control area, (P) *RMS Ref*, 4-25
- Print forms
 - See Forms
- Printing
 - distributed, (S) *Sys Mgr Essentials*, 13-13
 - files over the network, (S) *DECnet Intro*, 2-6

Printing (cont'd)

- from applications using spooled printers, (S) *Sys Mgr Essentials*, 7-14
- from a private volume, (G) *User*, 12-2
- job status, (S) *Sys Mgr Essentials*, 13-69
- landscape, (G) *User*, 4-19
- PostScript, (S) *Sys Mgr Essentials*, 13-9
- remotely, (S) *Sys Mgr Essentials*, 13-13
- resuming at a specified position, (S) *Sys Mgr Essentials*, 13-75, 13-76, 13-77
- test results, (S) *DECnet Mgmt Util*, 4-4, 4-6, 4-8, 4-11
- Print jobs, (G) *User*, 4-16
 - See also Batch jobs
 - delaying, (G) *User*, 4-19
 - executing, (G) *User*, 4-17
 - list of DCL commands to use with, (G) *User*, 4-19
 - obtaining multiple copies of, (G) *User*, 4-19
 - priorities, (G) *User*, 4-17
 - queue information, (G) *User*, 4-17
- Print operations, (G) *SW Overview*, 3-11
- Print queues, (P) *Rec Mgmt Util*, 4-22
 - See also Queue managers
 - assigning unique name to, (S) *VMScluster Sys*, 7-7
 - controlling, (G) *User*, 4-19
 - initializing, (S) *VMScluster Sys*, 7-8
 - sample configuration, (S) *VMScluster Sys*, 7-6
 - setting up clusterwide, (S) *VMScluster Sys*, 7-6
 - starting, (S) *VMScluster Sys*, 7-8
- Print queuing system
 - See Batch and print queuing system
- PRINT/REMOTE command
 - in network operations, (S) *DECnet Intro*, 2-6
 - using for remote files, (S) *DECnet Intro*, 2-6
- Print Symbiont Modification routines
 - See PSM routines
- Print symbionts
 - See Symbionts
- PRINT_ON_CLOSE attribute, (P) *Rec Mgmt Util*, 4-22
- Priority, (S) *Sys Mgr Essentials*, 6-2, 6-31
 - avoiding inversion, (P) *DECthreads*, 3-7, cma-52
 - base, (S) *Sys Mgr Essentials*, 6-2, 6-31; (S) *Alpha Perform*, 6-20
 - choosing for a batch queue, (S) *Sys Mgr Essentials*, 13-30
 - effect of changing, (S) *Sys Mgr Essentials*, 13-6
 - specifying for a batch queue, (S) *Sys Mgr Essentials*, 13-29
 - specifying for a queue, (S) *Sys Mgr Essentials*, 13-19
 - boosting, (S) *Alpha Perform*, 9-6
 - job scheduling, (S) *Sys Mgr Essentials*, 13-72

Priority

job scheduling (cont'd)

- changing for a job, (S) *Sys Mgr Essentials*, 13-72, 13-73
- display on banner pages, (S) *Sys Mgr Essentials*, 13-35, 13-37, 13-40, 13-41
- specifying for a job, (S) *Sys Mgr Essentials*, 13-70, 13-72
- modifying processes, (G) *DCL N-Z*, DCLII-185
- obtaining for thread, (P) *DECthreads*, pthread-44, cma-66
- process, (S) *DECamds*, 3-21
- process fix, (S) *DECamds*, 4-1
- setting for thread, (P) *DECthreads*, pthread-70, pthread-72, cma-71, cma-73
- specifying for batch jobs, (G) *DCL N-Z*, DCLII-410
- specifying for detached processes, (G) *DCL N-Z*, DCLII-61
- specifying for processes, (P) *Sys Svc II*, SYS2-254
- specifying for subprocesses, (G) *DCL N-Z*, DCLII-61
- task or thread, (P) *Debugger*, 16-16, 16-20
- Priority attribute, (P) *DECthreads*, pthread-8, pthread-14, cma-17, cma-24
- Priority of task or thread, (P) *Debugger*, 3-26
- Private LAN transport security, (S) *DECamds*, 1-3
- Private sections
 - definition, (P) *Concepts*, 19-13, 20-13
- Private volumes, (S) *Sys Mgr Essentials*, 8-9
- Privileged accounts, (S) *Security*, 8-14
- Privileged architecture library
 - See PALcode
- Privileged images, (S) *Sys Mgr Tuning*, 16-10, 16-14
- Privileged library vector
 - See PLV
- Privileged shareable images
 - creating, (P) *Concepts*, 18-1
 - declaring universal symbols in, (P) *Linker*, 4-11
 - definition, (P) *Concepts*, 18-1
 - protecting, (P) *Linker*, LINK-24
 - protecting image sections in, (P) *Linker*, LINK-59
- Privilege mode
 - recommended for logical names of system components, (S) *Sys Mgr Essentials*, 5-9
- Privileges, (S) *Sys Mgmt Util M-Z*, 2-6; (P) *Concepts*, 10-9
- ACNT, (S) *Security*, A-1
- affecting object access, (S) *Security*, 4-11
- all, (S) *Sys Mgr Essentials*, 6-4
- All category, (S) *Security*, 8-12, C-5
- allocate terminal, (P) *Debugger*, 13-6

Privileges (cont'd)

allowing nonprivileged users to run programs that require, (S) *Sys Mgr Tuning*, 16-14
ALLSPOOL, (S) *Security*, A-2
ALTPRI, (S) *Security*, A-2
assigning to installed images, (S) *Sys Mgmt Util A-L*, 11-9
assigning to known images, (S) *Sys Mgmt Util A-L*, 11-7
AUDIT, (S) *Security*, A-2
auditing use of, (S) *Security*, 3-19, 9-7
authorized process, (S) *Security*, 4-5, 8-12
BUGCHK, (S) *Security*, A-3
BYPASS, (S) *Security*, 4-11, 4-28, A-3; (P) *Concepts*, 9-5
bypassing ACLs, (S) *Security*, 4-28
bypassing protection codes, (S) *Security*, 4-28
captive accounts and, (S) *Security*, 7-7
categories of, (S) *Security*, 8-12
changing in SYSMAN, (S) *Sys Mgr Essentials*, 2-17
checking, (P) *Sys Svc I*, SYS1-93
CMEXEC, (S) *Security*, A-4
CMKRNL, (S) *Security*, A-4
default process, (S) *Security*, 4-5, 8-12
defined by access mode, (P) *Interfaces*, 4-2
definition, (S) *Security*, 4-5
DETACH, (S) *Security*, A-5
Devour category, (S) *Security*, 8-12, C-5
DIAGNOSE, (S) *Security*, A-6
disabling, (S) *Security*, 4-5
displaying current, (S) *Sys Mgmt Util M-Z*, 6-58
displaying processes, (G) *DCL N-Z*, DCLII-314
DOWNGRADE, (S) *Security*, A-6
enabling through SETPRV, (S) *Security*, 4-5
enhancement for installed files, (S) *Sys Mgr Tuning*, 16-13
EXQUOTA, (S) *Security*, A-6
files, (S) *Sys Mgr Essentials*, 6-4
file sharing and, (S) *Security*, 12-20
for SYSTEM account, (S) *Sys Mgr Essentials*, 2-9
GROUP, (S) *Security*, A-6, A-7
Group category, (S) *Security*, 8-12, C-5
GRPNAM, (S) *Security*, A-7, C-5
GRPPRV, (S) *Security*, 4-11, 4-24, 4-28, C-5; (S) *Sys Mgr Essentials*, 11-8
I/O operations, (P) *Concepts*, 9-2
IMPORT, (S) *Security*, A-8
influence on object access, (S) *Security*, 4-11
installation requirements, (S) *DECams*, A-2
logical I/Os, (P) *Concepts*, 9-4 to 9-6
LOG_IO, (S) *Security*, A-8
modifying for environment, (S) *Sys Mgmt Util M-Z*, 6-54
modifying processes, (G) *DCL N-Z*, DCLII-185
MOUNT, (S) *Security*, A-9; (P) *Concepts*, 9-4

Privileges (cont'd)

needed to perform BACKUP operations, (S) *Sys Mgmt Util A-L*, 7-11
NETMBX, (S) *Security*, A-9
network requirements, (S) *Security*, 12-1
Normal category, (S) *Security*, 8-12, C-5
Objects category, (S) *Security*, 8-12, C-5
OPER, (S) *Security*, 4-29, A-9
PFNMAP, (S) *Security*, A-12
physical I/Os, (P) *Concepts*, 9-3, 9-5, 9-6
PHY_IO, (S) *Security*, A-12
PRMCEB, (S) *Security*, A-13
PRMGBL, (S) *Security*, A-13
PRMMBX, (S) *Security*, A-14
process, (S) *Security*, A-1; (S) *Sys Mgr Essentials*, 6-3
PSWAPM, (S) *Security*, A-14
READALL, (S) *Security*, 4-11, 4-28, A-14
recommendations for different users, (S) *Security*, 8-13
related to group UIC, (S) *Security*, 8-1
reporting use with \$CHECK_PRIVILEGE, (S) *Security*, 9-9
required by ACL editor, (S) *Sys Mgmt Util A-L*, 1-4
required by SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-5
required for UETP, (S) *Sys Mgr Tuning*, 17-23
required to analyze RMS Journaling files, (P) *Rec Mgmt Util*, 1-9
required to mount volumes, (S) *Sys Mgr Essentials*, 8-15
requirements
 common event flag clusters, (S) *Security*, 5-3
 devices, (S) *Security*, 5-7
 global sections, (S) *Security*, 5-15
 logical name tables, (S) *Security*, 5-16
 queues, (S) *Security*, 5-18
 resource domains, (S) *Security*, 5-19
 volumes, (S) *Security*, 5-21
SECURITY, (S) *Security*, A-15
 to mount volume with protected subsystems, (S) *Sys Mgr Essentials*, 8-15
security administrator requirements, (S) *Security*, 6-4
SET PROCESS/PRIVILEGES, (S) *Security*, 4-5
SETPRV, (S) *Security*, A-15
setting for process, (P) *Sys Svc II*, SYS2-262
SHARE, (S) *Security*, A-15
SHMEM, (S) *Security*, A-16
specifying for subprocesses, (G) *DCL N-Z*, DCLII-61
SS\$_NOPRIV, (P) *Concepts*, 13-21
storage in UAF record, (S) *Security*, 8-12
summary of, (S) *Security*, 8-12, A-1

Privileges (cont'd)

- SYSGBL, (S) *Security*, A-16
- SYSLCK, (S) *Security*, A-16
- SYSNAM, (S) *Security*, A-16; (S) *Sys Mgr Essentials*, 8-16
- SYSPRV, (S) *Security*, 4-11; (S) *Sys Mgr Essentials*, 8-16
 - controlling access through, (S) *Security*, 4-28
 - effect on protection mechanisms, (S) *Security*, 4-28
 - giving rights of system user, (S) *Security*, 4-24; (S) *Sys Mgr Essentials*, 11-8
 - tasks requiring, (S) *Security*, A-17
- system
 - policies regarding, (S) *Dependable*, 3-14
- SYSTEM, (P) *Concepts*, 9-5
- System category, (S) *Security*, 8-12
- system services, (P) *Interfaces*, 4-2
- TMPMBX, (S) *Security*, A-18
- to run Data Analyzer node, (S) *DECamds*, A-14
- to run Data Provider node, (S) *DECamds*, A-14
- to start DECams, (S) *DECamds*, A-13
- trusted users and, (S) *Security*, C-5
- UAF records and, (S) *Security*, 4-5
- untrusted users and, (S) *Security*, C-5
- UPGRADE, (S) *Security*, A-18
- VOLPRO, (G) *User*, 12-5; (S) *Security*, A-18; (S) *Sys Mgr Essentials*, 8-14
 - to mount volume as foreign, (S) *Sys Mgr Essentials*, 8-15
- WORLD, (S) *Security*, A-19

Privileges required

- to analyze a crash dump, (P) *Alpha SDA*, SDA-30
- to analyze a running system, (P) *Alpha SDA*, SDA-9, SDA-30
- PRMCEB privilege, (S) *Security*, 5-3, A-13
- PRMGBL privilege, (S) *Security*, A-13
- PRMMBX privilege, (S) *Security*, 5-7, A-14
- Proactive memory reclamation, (S) *Alpha Perform*, 6-13 to 6-15

See also Memory management

- Proactive network monitoring and analysis products, (S) *Dependable*, 7-17 to 7-19

- Probers, catching, (S) *Security*, 10-2, 10-5

Problems

See also Troubleshooting

- OPCOM failure, (S) *Sys Mgr Essentials*, 2-22

- Problems, reporting, (S) *DECamds*, A-15

Procedure calls

- chain, (P) *Calling Std*, 3-29
- format, (P) *Interfaces*, 1-3
- testing for successful completion, (P) *Interfaces*, 2-22, 4-9
- tracing, (P) *Calling Std*, 3-30

- procedure data type, (P) *Interfaces*, B-14

Procedure descriptors

See PDSCs and DSCs

- Procedures, (P) *Calling Std*, 3-3

definition, (P) *Environment*, 10-1; (P) *Calling Std*, 1-5

entry point names, (P) *Modular Proc*, 3-3

function code, (P) *Interfaces*, B-10

grouping, (P) *Modular Proc*, 5-1

interface, (P) *Modular Proc*, 2-4, A-1

invocation handles, (P) *Calling Std*, 3-30

invoking, (P) *Calling Std*, 3-29

language support, (P) *Calling Std*, 1-5

libraries, (P) *Modular Proc*, 5-1

library, (P) *Calling Std*, 1-5

monitoring, (P) *Modular Proc*, 4-8, 4-9

operation, (P) *Interfaces*, B-10

representation, (P) *Interfaces*, 2-8

without frames, (P) *Calling Std*, 3-20

Procedure signature blocks

See PSBs

Procedure signature information blocks

See PSIGs

- Procedure signatures, (P) *Calling Std*, 3-22

default, (P) *Calling Std*, 3-28

- Procedure types, (P) *Calling Std*, 3-3

- Procedure values, (P) *Interfaces*, 2-8, B-14; (P) *Calling Std*, 3-37

bound, (P) *Calling Std*, 3-3, 3-43

definition, (P) *Calling Std*, 3-3

examining, (P) *Calling Std*, 3-41

Process

See Single Process Summary window

account quotas required for installation, (S) *DECamds*, A-3

error messages, (S) *DECamds*, 3-25

fixes, (S) *DECamds*, 4-1

looping fix, (S) *DECamds*, 4-2

name in CPU, (S) *DECamds*, 3-3

quotas

AMDS\$COMM process, (S) *DECamds*, 5-2

recommended, (S) *DECamds*, 5-15

security privileges, (S) *DECamds*, 1-4

states, (S) *DECamds*, 3-22

queues on CPUs, (S) *DECamds*, 3-14

Process activity statistics

in Monitor utility, (S) *Sys Mgmt Util M-Z*, 1-40

- Process and time management subsystem, (G) *SW Overview*, 3-1

Process characteristics

commonly changed, (G) *User*, 15-18

Process contexts

changing, (P) *Alpha SDA*, SDA-69, SDA-72,

SDA-89, SDA-127; (P) *VAX SDA*, SDA-72, SDA-77, SDA-99, SDA-148

list of characteristics, (G) *User*, 18-1, 18-2

- Process contexts (cont'd)
 using with \$GETJPI system service, (P) *Concepts*, 3-8
- Process control
 system services, (P) *Environment*, 10-6, 10-11
- Process control blocks
 See PCBs
- Process control region, (P) *Alpha SDA*, SDA-15;
 (P) *VAX SDA*, SDA-18
- Process control region operator (H), (P) *Alpha SDA*, SDA-13; (P) *VAX SDA*, SDA-16
- Process controls, (P) *Concepts*, 3-1
- Process default extension quantity, (P) *File Appl*, 3-5, 3-7
- Process defaults, (P) *Rec Mgmt Util*, 4-29
 batch queue, (P) *Rec Mgmt Util*, 4-24
 print queue, (P) *Rec Mgmt Util*, 4-22
- Process directory tables, (P) *Concepts*, 10-3
- Process dumps
 analyzing of, (G) *DCL A-M*, DCLI-29
- Processes, (G) *SW Overview*, 3-1, 5-2
 See also Detached processes, Subprocesses, SYS\$GETJPI system service, and SYS\$PROCESS_SCAN system service
 access rights of, (S) *Security*, 4-1
 ACMS, (S) *Dependable*, 8-53
 activation tracepoint, predefined, (P) *Debugger*, 14-13
 activities permitted by privileges, (S) *Security*, 8-12
 adding to exclusion list, (S) *Security*, 9-27
 adjusting priorities, (S) *VAX Perform*, 5-16;
 (S) *Alpha Perform*, 19-1
 affecting scheduling of, (P) *Sys Svc II*, SYS2-231
 and job trees, (G) *User*, 18-4
 auditing of, (S) *Security*, 9-6, 9-7
 auditing system services controlling, (S) *Security*, 9-7
 audit server, (S) *Security*, 9-23
 base priority, (S) *Alpha Perform*, 6-21
 blocked by higher-priority process, (S) *VAX Perform*, 4-33; (S) *Alpha Perform*, 15-1
 changing characteristics using lexical functions, (G) *User*, 17-3
 channel, (P) *Alpha SDA*, SDA-127; (P) *VAX SDA*, SDA-148
 checking status with Ctrl/T, (G) *User*, 2-21
 communicating between, (P) *Concepts*, 2-7
 communicating within, (P) *Concepts*, 2-1
 using logical names, (P) *Concepts*, 2-2
 using symbols, (P) *Concepts*, 2-5
 communication with, (S) *DECnet Intro*, 1-2
 compute-bound, (S) *VAX Perform*, 5-9; (S) *Alpha Perform*, 9-2, 17-8
 connecting debugger to, (P) *Debugger*, 14-4, 14-14
 connecting to, (G) *User*, 2-7, 18-8
- Processes (cont'd)
 connecting to, restrictions, (S) *Security*, 3-6
 creating, (G) *User*, 18-1; (P) *Sys Svc I*, SYS1-139
 restrictions, (P) *Concepts*, 3-2
 creating with different UICs, (S) *Security*, 4-3
 curtailing, (S) *VAX Perform*, 5-9; (S) *Alpha Perform*, 17-8
 default protection for, (S) *Security*, 5-11
 definition, (G) *User*, 18-1
 deleting, (P) *Concepts*, 3-44, 3-47; (P) *Sys Svc I*, SYS1-191
 detached, (G) *User*, 18-4
 disabling swap mode, (P) *Concepts*, 19-12, 20-12
 disconnected, (G) *User*, 2-7, 18-8; (S) *Security*, 3-6, 3-20
 logging out, (G) *User*, 18-9
 displaying
 buffered I/O count, (G) *DCL N-Z*, DCLII-333
 characteristics of, (G) *DCL N-Z*, DCLII-311
 CPU time used, (G) *DCL N-Z*, DCLII-333
 current physical memory occupied, (G) *DCL N-Z*, DCLII-333
 current working set size, (G) *DCL N-Z*, DCLII-333
 identification, (G) *DCL N-Z*, DCLII-312
 information on, (G) *DCL N-Z*, DCLII-241
 names, (G) *DCL N-Z*, DCLII-350
 open file count, (G) *DCL N-Z*, DCLII-333
 page faults, (G) *DCL N-Z*, DCLII-333
 privilege, (G) *DCL N-Z*, DCLII-314
 status, (G) *DCL N-Z*, DCLII-333
 updated information about, (G) *DCL N-Z*, DCLII-312, DCLII-313
 displaying list of systems processes, (G) *DCL N-Z*, DCLII-336
 displaying process rights identifiers, (G) *User*, 19-2; (S) *Security*, 4-4
 displaying SDA information, (P) *Alpha SDA*, SDA-127, SDA-155; (P) *VAX SDA*, SDA-148, SDA-179
 dormant, (S) *VAX Perform*, 2-17; (S) *Alpha Perform*, 6-12
 enabling privileges, (S) *Security*, 4-5
 examining hung, (P) *Alpha SDA*, SDA-9; (P) *VAX SDA*, SDA-11
 execution, (P) *Concepts*, 3-36
 getting information asynchronously, (P) *Sys Svc I*, SYS1-346
 getting information synchronously, (P) *Sys Svc I*, SYS1-366
 granting identifiers to, (S) *Sys Mgmt Util A-L*, 1-15
 hibernating, (P) *Concepts*, 3-36; (P) *Sys Svc II*, SYS2-103

Processes (cont'd)

- hibernation
 - with ATTACH command, (G) *DCL A-M*, DCLI-49; (S) *Sys Mgmt Util M-Z*, 6-13
- I/O-bound, (S) *VAX Perform*, 3-30; (S) *Alpha Perform*, 11-2
- identification, (P) *Concepts*, 3-3
- idle, (S) *VAX Perform*, 2-19; (S) *Alpha Perform*, 6-13
- image, (P) *Alpha SDA*, SDA-155; (P) *VAX SDA*, SDA-179
- image wakeup, (G) *DCL N-Z*, DCLII-57
- interactive mode, (G) *User*, 2-9; (S) *Security*, 3-4
- interprocess communication, (G) *SW Overview*, 3-3
- listening, (P) *Alpha SDA*, SDA-81; (P) *VAX SDA*, SDA-87
- locating a subset of, (P) *Sys Svc II*, SYS2-173
- lock, (P) *Alpha SDA*, SDA-128; (P) *VAX SDA*, SDA-149
- lock information, (P) *Concepts*, 3-29
- logging out of current, (S) *Security*, 3-20
- long-waiting, (S) *VAX Perform*, 2-20; (S) *Alpha Perform*, 6-13
- maintaining when disconnecting a terminal, (S) *Sys Mgr Essentials*, 7-11
- mapping actions to dependability requirements, (S) *Dependable*, 2-11
- modes of execution, (P) *Concepts*, 1-2
- modifying characteristics of, (G) *DCL N-Z*, DCLII-185
- modifying name, (P) *Concepts*, 3-31
- modifying the rights list, (S) *Security*, 8-11
- modifying working set default size, (G) *DCL N-Z*, DCLII-239
- multiple, (P) *SMG\$*, 4-1
- multiprocess debugging, (P) *Debugger*, 14-1
- obtaining information about
 - example, (P) *Concepts*, 3-8
 - processes on specific nodes, (P) *Concepts*, 3-21
 - synchronously, (P) *Concepts*, 3-22
 - using LIB\$GETJPI routine, (P) *Concepts*, 3-5
 - using PIDs, (P) *Concepts*, 3-5, 3-8
 - using process name, (P) *Concepts*, 3-6, 3-8
 - using SYS\$GETJPI system service, (P) *Concepts*, 3-5
 - using SYS\$GETJPIW system service, (P) *Concepts*, 3-5
- periodically waking, (S) *VAX Perform*, 2-21; (S) *Alpha Perform*, 6-14
- placing in wait state, (G) *DCL N-Z*, DCLII-426
- POSIX interprocess communication, (G) *SW Overview*, 3-3

Processes (cont'd)

- priority, (S) *Sys Mgr Essentials*, 6-31; (S) *VAX Perform*, 4-33; (S) *Alpha Perform*, 6-20, 15-1
 - See also Priority
- boosting, (S) *Alpha Perform*, 6-20
- for detached processes, (G) *DCL N-Z*, DCLII-61
- for subprocesses, (G) *DCL N-Z*, DCLII-61
- modifying, (P) *Concepts*, 3-30
- privileges
 - setting, (P) *Concepts*, 3-30
 - specifying for subprocesses, (G) *DCL N-Z*, DCLII-61
- real-time, (S) *Alpha Perform*, 6-20
- reconnecting, (G) *User*, 18-8
- reconnecting to, restrictions, (S) *Security*, 3-6
- reducing delay waiting for CPU, (S) *VAX Perform*, 5-17; (S) *Alpha Perform*, 19-2
- remote, (S) *DECnet Intro*, 2-3
- rescheduling, (P) *Sys Svc II*, SYS2-208
- resuming after suspension, (P) *Sys Svc II*, SYS2-213
- saving characteristics, (G) *User*, 17-4
- scanning, (P) *Sys Svc II*, SYS2-173
- scheduling, (P) *Concepts*, 3-30
- scheduling state, (P) *Alpha SDA*, SDA-130, SDA-155; (P) *VAX SDA*, SDA-152, SDA-179
- scheduling wakeup for, (P) *Sys Svc II*, SYS2-228
- security profiles of, (S) *Security*, 4-1
- setting default devices or directories, (G) *DCL N-Z*, DCLII-119
- setting default protection for, (P) *Sys Svc II*, SYS2-242
- setting name of, (P) *Sys Svc II*, SYS2-258
- setting priority of, (P) *Sys Svc II*, SYS2-254
- setting privileges, (P) *Sys Svc II*, SYS2-262
- setting stack limits, (P) *Sys Svc II*, SYS2-271
- setting swap mode for, (P) *Sys Svc II*, SYS2-273
- spawned, (P) *Concepts*, 1-1
- spawning a subprocess, (P) *Alpha SDA*, SDA-158; (P) *VAX SDA*, SDA-183
- state, (P) *Debugger*, 14-3
- states, (S) *Alpha Perform*, 6-19
 - collided page (COLPG), (S) *Alpha Perform*, 9-4
 - common event flag (CEF), (S) *Alpha Perform*, 9-4
 - compute (COM), (S) *Alpha Perform*, 9-1
 - compute outswapped (COMO), (S) *Alpha Perform*, 9-1
 - free page (FPG), (S) *Alpha Perform*, 9-4
 - hibernate (HIB), (S) *Alpha Perform*, 6-12
 - local event flag (LEF), (S) *Alpha Perform*, 6-12

Processes

- states (cont'd)
 - MWAIT, (S) *Alpha Perform*, 2-2
 - page fault (PFW), (S) *Alpha Perform*, 9-4
- status
 - displaying current, (G) *DCL N-Z*, DCLII-333
 - suspended, (S) *Alpha Perform*, 6-12
 - suspending, (S) *Security*, 9-27; (P) *Concepts*, 3-36, 3-40; (P) *Sys Svc II*, SYS2-389
- swap mode
 - enabling or disabling, (G) *DCL N-Z*, DCLII-187
- swapping, (P) *Concepts*, 19-12, 20-12
 - for created processes, (G) *DCL N-Z*, DCLII-62
- switching control of input stream, (G) *DCL A-M*, DCLI-49; (S) *Sys Mgmt Util M-Z*, 6-13
- synchronization, (S) *Alpha Perform*, 9-4
- synchronizing with batch job, (G) *DCL N-Z*, DCLII-416
- SYS\$PROCESS_SCAN system service
 - item list
 - to specify selection criteria about processes, (P) *Concepts*, 3-18, 3-19
 - with remote procedures, (P) *Concepts*, 3-22
 - item-specific flags to control selection information, (P) *Concepts*, 3-15
 - search, (P) *Concepts*, 3-14
- system, (P) *Alpha SDA*, SDA-72
- termination mailboxes, (P) *Concepts*, 3-47, 9-43
- termination tracepoint, predefined, (P) *Debugger*, 14-13
- time slicing, (S) *VAX Perform*, 4-33; (S) *Alpha Perform*, 15-2
- transferring control from, (S) *Sys Mgmt Util A-L*, 13-6
- types of resources, (P) *File Appl*, 1-38
 - asynchronous system trap limit (ASTLM), (P) *File Appl*, 1-39
 - buffered I/O limit (BIOLM), (P) *File Appl*, 1-39
 - I/O limit (DIOLM), (P) *File Appl*, 1-39
- UIC identifiers, (S) *Security*, 4-3
- waiting for entire set of event flags, (P) *Sys Svc II*, SYS2-423
- waiting for event flag to be set, (P) *Sys Svc II*, SYS2-420
- waiting for one of set of event flags, (P) *Sys Svc II*, SYS2-425
- waking, (P) *Sys Svc II*, SYS2-421
- wildcard search, (P) *Concepts*, 3-12
- working set

Processes

- working set (cont'd)
 - displaying quota and limit, (G) *DCL N-Z*, DCLII-355
 - working set limits, (S) *Alpha Perform*, 6-2
 - writing messages to, (P) *Sys Svc II*, SYS2-188
- PROCESSES class record
 - in Monitor utility, (S) *Sys Mgmt Util M-Z*, A-28
- Processes for achieving dependability, (S) *Dependable*, 2-1
- Processes for continuous system improvement, (S) *Dependable*, 2-1 to 2-4
- Process exclusion list, (S) *Security*, 9-27
- Process headers, (P) *Alpha SDA*, SDA-16
 - See also PHDs
 - system, (S) *Alpha Perform*, 6-18
- Process I/O segment, (P) *File Appl*, 1-38
- Process I/O Summary window, (S) *DECams*, 3-16 to 3-17
- Process identification numbers
 - See PID numbers
- Process identifier
 - See PID
- Process identifiers
 - limit in mixed-version VMScluster system, (G) *Compatibility*, 2-9
- Process indexes, (P) *Alpha SDA*, SDA-128; (P) *VAX SDA*, SDA-148
- Process information
 - system services, (P) *Environment*, 10-6, 10-12
- Processing
 - batch, (S) *Alpha Perform*, 6-2
 - centralized, (G) *SW Overview*, 1-4
 - deferred-write option, (P) *File Appl*, 3-18, 3-28
 - distributed, (G) *SW Overview*, 1-4
 - interactive, (S) *Alpha Perform*, 6-2
 - modes, (G) *SW Overview*, 1-3
 - options for improving file performance, (P) *File Appl*, 3-10
 - priorities, (G) *SW Overview*, 3-2
 - read-ahead option, (P) *File Appl*, 3-14, 3-15
 - transaction, (G) *SW Overview*, 2-13
 - write-behind option, (P) *File Appl*, 3-14, 3-15
- Processing environments
 - See Multiprocessing, Vector processing, and Distributed processing
- Processing job status, (S) *Sys Mgr Essentials*, 13-69
- Processing options
 - analysis output converter, (G) *DCL A-M*, DCLI-70
 - domain converter, (G) *DCL A-M*, DCLI-74
 - in an options file, (G) *DCL A-M*, DCLI-70
 - PostScript output converter, (G) *DCL A-M*, DCLI-72
 - text output converter, (G) *DCL A-M*, DCLI-71

Process limits

See Process quotas

Process logical name tables, (P) *Concepts*, 10-4

Process names, (G) *DCL N-Z*, DCLII-57; (P) *Concepts*, 3-3; (P) *Alpha SDA*, SDA-127; (P) *VAX SDA*, SDA-148

length of for remote processes, (P) *Concepts*, 3-6

obtain information about remote processes
example, (P) *Concepts*, 3-12

setting, (P) *Sys Svc II*, SYS2-258

specifying for local processes, (P) *Concepts*, 3-6

specifying for remote processes, (P) *Concepts*, 3-6

specifying processes by, (P) *Sys Svc II*,
SYS2-179

specifying processes with node name, (P) *Sys Svc II*, SYS2-178

using to obtain information about remote
processes, (P) *Concepts*, 3-6, 3-8, 3-19
within group, (P) *Concepts*, 3-4

Processor base registers, (P) *Alpha SDA*, SDA-16

Processor context

changing, (P) *Alpha SDA*, SDA-68, SDA-73,
SDA-86, SDA-89, SDA-127; (P) *VAX SDA*, SDA-72, SDA-78, SDA-95, SDA-99,
SDA-148

Processor modes, (S) *Alpha Perform*, 9-7

Processor modes statistics

in Monitor utility, (S) *Sys Mgmt Util M-Z*,
1-33

/PROCESSOR qualifier

in Mount utility, (S) *Sys Mgmt Util M-Z*, 2-30

Processors, (S) *Sys Mgr Tuning*, 26-3

Alpha, (G) *SW Overview*, 1-1, 1-14

causing thread to release control of, (P) *DECthreads*, pthread-77, cma-77

fault-tolerant, (G) *SW Overview*, 1-14

real-time, (G) *SW Overview*, 1-14

showing state of attached, (G) *DCL N-Z*,
DCLII-254

showing state of secondary, (G) *DCL N-Z*,
DCLII-254

starting attached, (G) *DCL N-Z*, DCLII-364

starting secondary, (G) *DCL N-Z*, DCLII-364

stopping attached, (G) *DCL N-Z*, DCLII-386

stopping secondary, (G) *DCL N-Z*, DCLII-386
VAX, (G) *SW Overview*, 1-1, 1-14

Processor-specific loadable code

base address, (P) *VAX SDA*, SDA-18

Processor status

See PS

Processor status longwords

See PSLs

Processor type identifier

Alpha, (G) *Compatibility*, A-3

VAX, (G) *Compatibility*, A-3

Processor types

displaying, (P) *VAX SDA*, SDA-96

Process-permanent files, (P) *File Appl*, 1-38, 6-19
restriction to gathering RMS statistics, (P) *File Appl*, 3-29

Process-permanent I/O structures, (P) *VAX SDA*,
SDA-81

/PROCESS qualifier, (P) *Debugger*, 14-5, 14-15;
(P) *Alpha SDA*, SDA-159; (P) *VAX SDA*,
SDA-184

Process quotas, (S) *Sys Mgr Essentials*, 6-2; (S) *VMSccluster Sys*, 10-18; (P) *File Appl*, 1-38

See also Quotas

account jobs, (S) *Sys Mgr Essentials*, 6-43

adjusting for vector processing, (S) *Sys Mgr Tuning*, 26-7

AST queue, (S) *Sys Mgr Essentials*, 6-41

CPU times, (S) *Sys Mgr Essentials*, 6-42

detached process, (S) *Sys Mgr Essentials*, 6-43

direct I/O count, (S) *Sys Mgr Essentials*, 6-42

displaying, (G) *DCL N-Z*, DCLII-314

enqueue quota, (S) *Sys Mgr Essentials*, 6-42

expiration, (S) *Sys Mgr Essentials*, 6-42

for Snapshot facility, (S) *Sys Mgr Essentials*,
4-20

jobwide logical name table, (S) *Sys Mgr Essentials*, 6-43

open file, (S) *Sys Mgr Essentials*, 6-43

paging file, (S) *Sys Mgr Essentials*, 6-43

process jobs, (S) *Sys Mgr Essentials*, 6-43

recommended values for backups, (S) *Sys Mgr Essentials*, 10-10

setting, (S) *Sys Mgr Essentials*, 6-40

setting before a backup, (S) *Sys Mgr Essentials*, 10-9

specifying for detached processes, (G) *DCL N-Z*, DCLII-60, DCLII-61

specifying for subprocesses, (G) *DCL N-Z*,
DCLII-60, DCLII-61

subprocess creation, (S) *Sys Mgr Essentials*,
6-43

system resources, (S) *Sys Mgr Essentials*, 6-39

timer queue entry, (S) *Sys Mgr Essentials*,
6-43

working set

default, (S) *Sys Mgr Essentials*, 6-43

quota, (S) *Sys Mgr Essentials*, 6-44

Process rights lists, (P) *Concepts*, 23-1

Process scan, (P) *Sys Svc II*, SYS2-173

Process scheduling

See Scheduling

Process searches, (P) *Concepts*, 3-8 to 3-21

searching nodes, (P) *Concepts*, 3-21

searching on all nodes, (P) *Concepts*, 3-20

searching on specific nodes, (P) *Concepts*, 3-20

using item list with remote procedures, (P) *Concepts*, 3-22

- Process searches (cont'd)
 - using item-specific flags to control selection information, (P) *Concepts*, 3-15
 - using SYS\$PROCESS_SCAN system service item list to specify processes
 - example, (P) *Concepts*, 3-18
 - using SYS\$PROCESS_SCAN system service item list to specify selection criteria about processes, (P) *Concepts*, 3-19
 - using wildcard on local system, (P) *Concepts*, 3-12
- Process section table
 - See PST
- Process states statistics
 - in Monitor utility, (S) *Sys Mgmt Util M-Z*, 1-49
- Process threads, (P) *Concepts*, 1-1
- /PROCESS_GROUP qualifier, (P) *Debugger*, 14-12
- process_id data type, (P) *Interfaces*, B-14
- PROCESS_MANAGEMENT.EXE file
 - global symbols, (P) *VAX SDA*, SDA-65
- PROCESS_MANAGEMENT.STB file
 - global symbols, (P) *Alpha SDA*, SDA-61
- %PROCESS_NAME built-in symbol, (P) *Debugger*, 14-11
- process_name data type, (P) *Interfaces*, B-14
- %PROCESS_NUMBER built-in symbol, (P) *Debugger*, 14-11
- %PROCESS_PID built-in symbol, (P) *Debugger*, 14-11
- /PROCESS_SECTION_TABLE qualifier, (P) *Alpha SDA*, SDA-128; (P) *VAX SDA*, SDA-149
- PRO/DECnet software, (S) *DECnet Intro*, 1-6
- Product Authorization Keys
 - See PAKs
- PRODUCT command, (S) *Sys Mgmt Util M-Z*, 3-3, 3-5
 - DCL interface syntax, (S) *Sys Mgr Essentials*, 3-18
 - DECwindows Motif interface syntax, (S) *Sys Mgr Essentials*, 3-18
- Product configuration files
 - See PCFs
- Product database, (S) *Sys Mgr Essentials*, 3-35
 - See PDB
 - definition of, (S) *Sys Mgr Essentials*, 3-20
 - how to use, (S) *Sys Mgr Essentials*, 3-26
 - noncompliant products, (S) *Sys Mgr Essentials*, 3-27
 - removing products from, (S) *Sys Mgr Essentials*, 3-34
 - retrieving product information from, (S) *Sys Mgr Essentials*, 3-33
 - tracking software dependencies, (S) *Sys Mgr Essentials*, 3-27
- Product database (cont'd)
 - volume label change, (S) *Sys Mgr Essentials*, 3-33
- Product dependencies, (S) *Sys Mgr Essentials*, 3-27
- Product description files
 - See PDFs
- Product installation log file
 - on Alpha systems, (S) *Comparison*, 2-25
- PRODUCT INSTALL command, (S) *Sys Mgr Essentials*, 3-27
- Production systems
 - dependability, (G) *SW Overview*, 7-2
 - description, (G) *SW Overview*, 7-1
 - managing and monitoring, (G) *SW Overview*, 7-4
 - needs, (G) *SW Overview*, 7-1
- OpenVMS capabilities, (G) *SW Overview*, 2-1, 2-11
- OpenVMS management tools, (G) *SW Overview*, 7-4
- Productivity of personnel, (S) *Dependable*, 4-13 to 4-14
- Product list
 - obtaining, (S) *Sys Mgr Essentials*, 3-10
 - VMSINSTAL.COM parameter, (S) *Sys Mgr Essentials*, 3-10
- Product listing, (S) *Sys Mgr Essentials*, 3-35
- Product options
 - See Options
- Products
 - See Software products
- Professional 300-series systems
 - in network operations, (S) *DECnet Intro*, 1-6
- Profiles, (S) *Sys Mgmt Util M-Z*, 6-53
 - See also Security profiles
 - adjusting, (S) *Sys Mgmt Util M-Z*, 6-54
 - displaying, (S) *Sys Mgmt Util M-Z*, 6-58
 - in MAIL, (S) *Sys Mgr Essentials*, 6-38
 - in SYSMAN, (S) *Sys Mgr Essentials*, 2-16; (S) *Sys Mgmt Util M-Z*, 6-32
 - changing default directory, (S) *Sys Mgr Essentials*, 2-17
 - changing privileges, (S) *Sys Mgr Essentials*, 2-17
- Program counters
 - See PCs
- Program development, (G) *SW Overview*, 4-1
- Program execution mode
 - using to call services, (P) *RMS Ref*, 2-8
- Program load request, (S) *DECnet Mgmt*, 4-2
- Programming
 - common environments, (G) *SW Overview*, 4-1
 - custom applications, (S) *Dependable*, 3-8
 - Digital methodology
 - services from Digital, (S) *Dependable*, 10-5

Programming (cont'd)

- examples calling system services, (P)
 - Interfaces*, 4-10
 - modular techniques, (G) *SW Overview*, 4-2;
(P) *Environment*, 2-1
 - prototyping applications, (S) *Dependable*, 8-31
to 8-33
 - software development tools, (G) *SW Overview*,
4-3
 - synchronization errors, list of, (P) *DECthreads*,
3-1
 - testing applications, (S) *Dependable*, 8-33 to
8-34
 - to standards, (G) *SW Overview*, 4-2; (P)
Environment, 2-1
 - writing predictable code, (S) *Dependable*, 8-29
to 8-31
- ## Programming environment
- differences on Alpha and VAX, (G)
Compatibility, 1-12
 - similarities on Alpha and VAX, (G)
Compatibility, 1-12
- ## Programming interface, (P) *File Appl*, 4-20 to RMS, (P) *RMS Ref*, 2-1
- ## Programming languages
- accessing remote files, (S) *DECnet Intro*, 2-12
 - in network application, (S) *DECnet Mgmt*,
1-18
 - selecting for network operation, (S) *DECnet
Mgmt*, 1-18
 - using control blocks with, (P) *RMS Ref*, 2-1
- ## /PROGRAM qualifier, (P) *Debugger*, 11-20
- ## Program region page table
- displaying, (P) *VAX SDA*, SDA-149
- ## Program regions, (P) *Concepts*, 19-8, 20-6
- adding page to, (P) *Sys Svc I*, SYS1-269
 - base register, (P) *VAX SDA*, SDA-18
 - deleting page from, (P) *Sys Svc I*, SYS1-193
 - examining, (P) *Alpha SDA*, SDA-49; (P) *VAX
SDA*, SDA-56
 - length register, (P) *VAX SDA*, SDA-18
- ## Programs
- analyze retransmission errors, (S) *VMScluster
Sys*, F-36
 - argument, (P) *Debugger*, 2-2
 - bringing under debugger control, (P) *Debugger*,
2-1, 2-5
 - continuing execution of, (G) *DCL A-M*,
DCLI-63
 - display kind, (P) *Debugger*, 11-19
 - executing, (P) *Concepts*, 3-34
 - execution, (P) *Concepts*, 3-31
 - including in data files, (G) *User*, 16-8
 - LAN analyzer partner, (S) *VMScluster Sys*,
F-37
 - LAN analyzer scribe, (S) *VMScluster Sys*, F-38
 - LAN analyzer starter, (S) *VMScluster Sys*,
F-36

Programs (cont'd)

- marking beginning of input stream, (G) *DCL
A-M*, DCLI-112
 - marking end of input stream, (G) *DCL A-M*,
DCLI-206
 - rerunning under debugger control, (P)
Debugger, 2-5
 - resuming execution of, (G) *DCL A-M*, DCLI-63
 - running under debugger control, (P) *Debugger*,
5-9
 - termination, (P) *Debugger*, 2-4, 5-9
- ## Programs decomposition, (P) *Concepts*, 14-13
- ## Program sections, (P) *Modular Proc*, 2-12, 3-4, A-2
- as universal symbols, (P) *Linker*, 4-4
- ## attributes
- conflicting, (P) *Linker*, 3-25
 - determining image section attributes, (P)
Linker, 3-12
 - effects on image section creation, (P)
Linker, 3-11
 - modifying, (P) *Linker*, 3-22
- ## collecting into image sections, (P) *Linker*, 3-10, 3-22, LINK-48
- ## concatenated, (P) *Linker*, 3-17
- ## declaring as universal symbols, (P) *Linker*, 4-9
- ## determining image section location, (P) *Linker*, 3-16
- ## determining the address of, (P) *Linker*, 3-18
- ## Digital-written, (P) *Modular Proc*, 3-4
- ## implicit setting of GBL attribute by linker, (P) *Linker*, 2-18
- ## in ANALYZE/OBJECT listing, (P) *Linker*, 3-6
- ## in shareable images
- object module format, (P) *Linker*, B-14
- ## isolating in an image section, (P) *Linker*, 3-23
- ## LIB\$INITIALIZE, (P) *Modular Proc*, 3-13
- ## listed in map file, (P) *Linker*, 3-16, 5-6
- ## modifying program section attributes, (P) *Linker*, 3-22
- ## NOMOD attribute
- resolving conflicts, (P) *Linker*, 3-25
- ## object module definition format, (P) *Linker*, A-8, B-11
- ## overlaid, (P) *Linker*, 2-1, 3-17, 4-4
- ## significant attributes of, (P) *Linker*, 3-13
- ## SOLITARY attribute, (P) *Linker*, 3-23
- ## sorting by attributes, (P) *Linker*, 3-11
- ## specifying values of attributes, (P) *Linker*, LINK-60
- ## standard program section names (Alpha systems only), (P) *Linker*, B-16
- ## user-written, (P) *Modular Proc*, 3-4
- ## Program stubs
- in command procedures, (G) *User*, 15-10
 - replacing with commands, (G) *User*, 15-19

- PROHIBIT attribute, (P) *Rec Mgmt Util*, 4-36;
(P) *File Appl*, 7-4
- Project accounts, (S) *Security*, 8-21
 - as protected subsystems, (S) *Security*, 13-2
- Prolog 1 files, (P) *File Appl*, 3-19
- Prolog 2 files, (P) *File Appl*, 3-19
- Prolog 3 files, (P) *Rec Mgmt Util*, 4-26; (P) *File Appl*, 3-19, 10-28
- Prolog 3 indexed files
 - creating with CONVERT routines, (P) *Util Routines*, CONV-13
 - reclaiming, (P) *Util Routines*, CONV-16
 - reclaiming empty buckets, (P) *Rec Mgmt Util*, 3-1
 - with Convert/Reclaim utility, (P) *Util Routines*, CONV-1
- PROLOG attribute, (P) *Rec Mgmt Util*, 2-14, 4-26, 4-27, 4-28
- Prolog files, (P) *File Appl*, 3-15, 3-18, 3-19, 3-22
 - using with CONVERT routines, (P) *Util Routines*, CONV-13
- Prolog levels, (P) *RMS Ref*, RMS-19
- PROLOG structure, (P) *File Appl*, 10-15, 10-16
- Prompt for input
 - with LIB\$GET_INPUT routine, (P) *Concepts*, 7-4
- Prompting sequence
 - examples, (S) *DECnet Mgmt Util*, 1-6 to 1-7
 - exiting, (S) *DECnet Mgmt Util*, 1-5
- /PROMPT qualifier, (P) *Debugger*, 11-20
- Prompts, (G) *User*, 3-5
 - DCL, (G) *User*, 2-2
 - debugger, (P) *Debugger*, 1-13, 5-7, 5-8, 5-14, 14-2, 14-8
 - display (PROMPT), (P) *Debugger*, 11-7
 - displaying in command procedures, (G) *DCL A-M*, DCLI-273
 - in Mail, (G) *User*, 6-2
 - multiprocess program, (P) *Debugger*, 14-2, 14-8
 - NCP syntax, (S) *DECnet Mgmt Util*, 1-4
 - switchhook in Phone, (G) *User*, 7-3
- Prompt strings, setting with CLI\$DCL_PARSE, (P) *Util Routines*, CLI-7
- Propagating protection, example, (S) *Security*, 12-22
- PROTECT= option, (P) *Linker*, LINK-59
- Protected attribute, (S) *Security*, 4-23, 4-28
 - deleting ACEs with, (S) *Security*, 4-22
- Protected images, (S) *Sys Mgr Tuning*, 16-11, 16-14, 16-15
- Protected object databases, (S) *Security*, 11-6
- Protected subsystems, (G) *SW Overview*, 3-16; (S) *Sys Mgr Essentials*, 6-16
 - advantages of, (S) *Security*, 13-1
 - applications for, (S) *Security*, 13-2
 - constructing, (S) *Security*, 13-4
- Protected subsystems (cont'd)
 - controlling access to, (S) *Sys Mgmt Util A-L*, 1-15
 - description of, (S) *Security*, 13-2, 13-6
 - design requirements, (S) *Security*, 13-3
 - enabling, (S) *Security*, 13-5; (S) *Sys Mgr Essentials*, 8-28
 - example, (S) *Security*, 13-6
 - file protection, (S) *Security*, 13-8, 13-9
 - mounting volumes with, (S) *Security*, 13-5; (S) *Sys Mgr Essentials*, 8-15
 - printer protection, (S) *Security*, 13-10
 - Subsystem ACEs, (S) *Security*, 13-4
 - system management requirements, (S) *Security*, 13-3
 - user access, (S) *Security*, 13-6
- Protecting against environmental factors, (S) *Dependable*, 1-5
- Protecting image sections
 - using the PROTECT= option, (P) *Linker*, LINK-59
- Protecting remote files, (S) *DECnet Intro*, 2-3, 3-35
- Protecting shareable images, (P) *Linker*, LINK-24
- Protection
 - See also File protection, Mailboxes, Security, and Security profiles
 - access category, (P) *File Appl*, 4-26
 - ACL-based, (S) *Security*, 8-20; (S) *Sys Mgr Essentials*, 6-16, 6-32, 11-9; (P) *File Appl*, 1-33, 4-26
 - and MOUNT command, (S) *Sys Mgmt Util M-Z*, 2-31
 - applying to public disk volumes, (S) *Sys Mgr Essentials*, 8-15
 - applying to queues, (S) *Sys Mgr Essentials*, 13-22 to 13-26
 - applying to system dump file, (S) *Sys Mgr Tuning*, 15-4
 - assigning code when mounting a volume, (S) *Sys Mgr Essentials*, 8-23
 - by access mode, (P) *Interfaces*, 4-2
 - capability, (S) *Security*, 5-2
 - changing, (S) *Sys Mgr Essentials*, 8-16
 - changing with PROTECTION qualifier, (S) *Sys Mgr Essentials*, 8-18
 - command procedures and, (S) *Security*, 8-25
 - common event flag clusters, (S) *Security*, 5-3
 - debugging with two terminals, (P) *Debugger*, 13-6
 - default, (G) *User*, 19-5
 - changing, (S) *Sys Mgr Essentials*, 9-8
 - default at disk initialization, (G) *DCL A-M*, DCLI-251
 - default for foreign volumes, (S) *Sys Mgmt Util M-Z*, 2-20
 - defining at directory creation, (G) *DCL A-M*, DCLI-92

Protection (cont'd)

- defining at file creation, (G) *DCL A-M*, DCLI-89
- deleted data, (S) *Security*, 5-12
- devices, (S) *Security*, 5-6; (P) *Concepts*, 9-5
- directory, (G) *User*, 5-7
 - changing with SET SECURITY /PROTECTION command, (S) *Sys Mgr Essentials*, 9-12
 - specifying with CREATE/DIRECTORY command, (S) *Sys Mgr Essentials*, 9-12
 - specifying with /PROTECTION qualifier, (S) *Sys Mgr Essentials*, 9-12
- directory entry, (P) *I/O User*, 1-9
- disk and tape volumes, (P) *File Appl*, 1-33
- disk volumes, (G) *DCL A-M*, DCLI-255; (S) *Sys Mgr Essentials*, 8-16
- displaying, (S) *Sys Mgr Essentials*, 9-7
- displaying default, (G) *DCL N-Z*, DCLII-319
- establishing default, (G) *DCL N-Z*, DCLII-193
- file
 - for system dump file, (S) *Sys Mgr Tuning*, 15-4
- for interchange environments, (S) *Sys Mgr Essentials*, 8-20
- format for object, (S) *Sys Mgr Essentials*, 11-8
- global sections, (S) *Security*, 5-15
- I/O operations, (P) *Concepts*, 9-2
- logical name tables, (S) *Security*, 5-16
- magnetic tape volumes, (G) *DCL A-M*, DCLI-255
- mailboxes, (P) *Concepts*, 9-4
- managing defaults, (S) *Security*, 8-15, 8-19
- mask, (S) *Sys Mgr Essentials*, 8-17; (P) *Concepts*, 9-4
- modifying, (G) *DCL N-Z*, DCLII-190
 - device, (G) *DCL N-Z*, DCLII-194
 - directory, (G) *DCL N-Z*, DCLII-190
 - file, (G) *DCL N-Z*, DCLII-190
- mounting a volume with protected subsystems, (S) *Sys Mgr Essentials*, 8-28
- objects, (G) *User*, 19-3; (S) *Security*, 4-6
- of devices, (S) *Sys Mgr Essentials*, 7-5
- of files, (G) *User*, 4-16
 - in Mail, (G) *User*, 6-16
- of queues, (P) *Sys Svc II*, SYS2-355
- of terminal, (P) *Debugger*, 13-6
- overriding, (S) *Sys Mgr Essentials*, 8-25
- page, (P) *Concepts*, 19-10, 20-10
- qualifier for SET VOLUME command, (S) *Sys Mgr Essentials*, 8-18
- queues, (S) *Security*, 5-17
- resource domains, (S) *Security*, 5-19
- security class, (S) *Security*, 5-20
- setting for page, (P) *Sys Svc II*, SYS2-259
- through protected subsystems, (S) *Security*, 13-1

Protection (cont'd)

- UIC-based codes, (S) *Security*, 4-7; (S) *Sys Mgr Essentials*, 6-16; (P) *File Appl*, 1-33, 4-26
- volumes, (S) *Security*, 5-21; (S) *Sys Mgr Essentials*, 9-4; (P) *Concepts*, 9-4
 - disk, (S) *Sys Mgr Essentials*, 8-14, 8-15
 - ISO 9660-formatted media, (S) *Sys Mgr Essentials*, 8-17
 - standard-labeled, (S) *Sys Mgr Essentials*, 8-19
 - tape, (S) *Sys Mgr Essentials*, 8-15, 8-19, 9-22
 - VOLPRO privilege, (S) *Sys Mgr Essentials*, 8-14
- volume set
 - ISO 9660-formatted media, (S) *Sys Mgr Essentials*, 8-17
- PROTECTION attribute, (P) *Rec Mgmt Util*, 4-22; (P) *File Appl*, 4-32
- Protection checking, (S) *Security*, 4-11
 - overriding MOUNT command, (S) *Sys Mgr Essentials*, 8-23
- Protection codes, (G) *User*, 19-4; (S) *Security*, B-1; (P) *Rec Mgmt Util*, 4-23
 - access specification, (S) *Security*, 4-25
 - access types, (G) *User*, 19-5; (S) *Security*, 4-25; (S) *Sys Mgr Essentials*, 11-8
 - assigning during file creation, (S) *Security*, 8-16
 - bypassing with special rights, (S) *Security*, 4-28
 - categories of, (G) *User*, 19-4
 - changing, (S) *Security*, 4-26; (S) *Sys Mgr Essentials*, 9-8
 - default file protection, (S) *Security*, 4-27, 8-19
 - definition, (S) *Security*, 2-5, 4-7
 - denying all access, (S) *Security*, 4-26
 - effect of privileges, (S) *Security*, 4-11
 - evaluation sequence, (S) *Security*, 4-8
 - format, (S) *Security*, 4-24; (S) *Sys Mgr Essentials*, 11-8
 - granting control access, (S) *Security*, 4-25
 - interaction with ACLs, (S) *Security*, 4-26
 - interpreting, (S) *Security*, 4-8
 - multiple user categories and, (S) *Security*, 4-25
 - null access specification, (S) *Security*, 4-24, 4-25; (S) *Sys Mgr Essentials*, 11-8
 - priority in access evaluation, (S) *Security*, 4-11
 - processing, (S) *Security*, 4-25
 - propagating UIC-based protection in a directory tree, (S) *Sys Mgmt Util A-L*, 1-11
 - queue access rights, (S) *Security*, 5-17
 - reading, (S) *Security*, 4-25
 - restoring file default, (S) *Security*, 4-27
 - security element of an object, (S) *Security*, 4-7
 - sequence of checking categories, (S) *Security*, 4-25

Protection codes (cont'd)

- specifying, (S) *Sys Mgr Essentials*, 9-6
- user categories, (S) *Security*, 4-8
- /PROTECTION qualifier
 - in Backup utility, (S) *Sys Mgmt Util A-L*, 7-50
 - in Mount utility, (S) *Sys Mgmt Util M-Z*, 2-31
- /PROTECT qualifier, (P) *Linker*, LINK-24
- Protocol bit mask
 - error definitions, (S) *Sys Mgmt Util A-L*, 13-49
- Protocol module counters, (S) *DECnet Mgmt Util*, B-13
- Protocol ports, (S) *TCP/IP*, 2-5
- Protocols, (G) *Compatibility*, 2-2; (S) *TCP/IP*, 1-1, 2-1; (S) *DECnet Mgmt*, 1-3
 - autodial, (S) *Security*, 12-17; (S) *DECnet Intro*, 3-26
 - Channel Control (CC), (S) *VMScluster Sys*, F-3
 - communications, (S) *DECnet Intro*, 1-4
 - Datagram Exchange (DX), (S) *VMScluster Sys*, F-3
 - DDCMP, (S) *DECnet Intro*, 1-12
 - DDE, (P) *Environment*, 3-6
 - DECnet data link, (S) *DECnet Intro*, 1-4
 - DNA, (G) *SW Overview*, 1-10, 2-10; (S) *DECnet Intro*, 1-4; (P) *Environment*, 3-1
 - for using TCP/IP, (G) *V6.2 New Feat*, 3-23; (S) *Sys Mgr Tuning*, 21-13
 - FTP, (S) *Sys Mgr Tuning*, 21-14
 - IPX, (G) *SW Overview*, 6-25
 - LAD, (G) *SW Overview*, 3-13, 6-8
 - LAST, (G) *SW Overview*, 6-8
 - LASTport, (S) *Sys Mgr Tuning*, 23-5
 - LASTport/Disk, (S) *Sys Mgr Tuning*, 23-5
 - LASTport/Tape, (S) *Sys Mgr Tuning*, 23-6
 - LAT, (G) *SW Overview*, 3-13, 6-8; (S) *DECnet Intro*, 1-7
 - NetWare, (G) *SW Overview*, 6-25
 - networking, (G) *SW Overview*, 1-9
 - NFS, (G) *SW Overview*, 1-10
 - OSI, (G) *SW Overview*, 1-10, 2-10; (P) *Environment*, 3-1
 - PEDRIVER implementation of NISCA, (S) *VMScluster Sys*, F-4
 - PEX, (P) *Environment*, 2-6
 - Physical Interconnect (PI), (S) *VMScluster Sys*, F-3
 - Port-to-Port Communication (PPC), (S) *VMScluster Sys*, F-3
 - Port-to-Port Driver (PPD), (S) *VMScluster Sys*, F-3
 - RCP, (S) *Sys Mgr Tuning*, 21-14
 - RLOGIN, (S) *Sys Mgr Tuning*, 21-13
 - System Application (SYSAP), (S) *VMScluster Sys*, F-2
 - System Communications Services (SCS), (S) *VMScluster Sys*, F-2
 - TCP/IP, (G) *SW Overview*, 1-10, 2-11, 6-6; (P) *Environment*, 3-2

Protocols (cont'd)

- TELNET, (S) *Sys Mgr Tuning*, 21-13
- Transport (TR), (S) *VMScluster Sys*, F-3
- two-phase commit, (G) *SW Overview*, 3-6, 7-13
- virtual terminal, (S) *Sys Mgr Tuning*, 21-13
- Prototyping
 - applications, (S) *Dependable*, 8-31 to 8-33
- Providing multiple paths to Ethernet and FDDI, (S) *Dependable*, 7-4
- Providing multiple WAN connections for VAXft systems, (S) *Dependable*, 7-15
- Proxies
 - access, (S) *DECnet Mgmt*, 2-34
 - setting up proxy database for, (S) *Security*, 12-5
 - access control, (S) *Security*, 12-3
 - removing, (S) *Security*, 12-7
 - access display for executor, (S) *DECnet Mgmt*, 3-71
 - access display for object, (S) *DECnet Mgmt*, 3-72
 - access file specification, (S) *DECnet Mgmt*, 3-71
 - account, (S) *DECnet Mgmt*, 2-34
 - adding, (P) *Sys Svc I*, SYS1-14
 - deleting, (P) *Sys Svc I*, SYS1-183
 - displaying, (P) *Sys Svc I*, SYS1-211
 - login, (S) *DECnet Mgmt*, 2-34
 - modifying, (P) *Sys Svc I*, SYS1-14, SYS1-183
 - parameters, (S) *DECnet Mgmt Util*, 3-75
 - verifying, (P) *Sys Svc II*, SYS2-415
- Proxy access, (S) *Security*, 12-4
- Proxy accounts, (G) *User*, 19-8; (G) *SW Overview*, 6-7; (S) *Security*, 3-15, 12-4, 12-10; (S) *DECnet Intro*, 2-3, 3-35, 4-10
 - adding, (S) *Sys Mgr Essentials*, 6-35; (S) *Sys Mgmt Util A-L*, 5-22
 - as captive accounts, (S) *Security*, 12-8
 - as restricted accounts, (S) *Security*, 7-13
 - C2 systems and, (S) *Security*, C-7
 - default, (G) *User*, 19-9; (S) *Security*, 3-17
 - deleting, (S) *Sys Mgmt Util A-L*, 5-42
 - example, (S) *Security*, 12-8, 12-22
 - for multiple users, (G) *User*, 19-9
 - for single user, (G) *User*, 19-9
 - general access, (G) *User*, 19-9
 - general-access, (S) *Security*, 3-16
 - maximum number allowed, (G) *User*, 19-8
 - modifying, (S) *Sys Mgmt Util A-L*, 5-39
 - multiple-user, (S) *Security*, 3-16
 - naming, (G) *User*, 19-9; (S) *Security*, 3-17
 - network, (S) *Sys Mgr Essentials*, 6-34
 - recommended restrictions, (S) *Security*, 12-8
 - selecting from multiple, (G) *User*, 19-9; (S) *Security*, 3-17
 - single-user, (S) *Security*, 3-16

- Proxy Agent
 - PC NSI, (P) *Environment*, 3-5
- Proxy authorization files, (G) *V6.2 New Feat*, 3-17; (S) *Sys Mgr Essentials*, 6-4
- NET\$PROXY.DAT, (G) *V6.2 New Feat*, 3-17; (S) *Sys Mgr Essentials*, 6-35
- NETPROXY.DAT, (G) *V6.2 New Feat*, 3-17; (S) *Sys Mgr Essentials*, 6-35
- Proxy database, (S) *Security*, 12-5
 - logical name defining location, (S) *Sys Mgr Essentials*, 5-8
 - managed by security server, (S) *Sys Mgr Essentials*, 5-5
 - setting up, (S) *Security*, 12-6
- Proxy logins, (G) *User*, 2-10, 19-7; (S) *Security*, 3-7, 3-15, 12-4; (S) *Sys Mgmt Util A-L*, 5-22, 5-39
 - access control, (S) *Security*, 12-4; (S) *DECnet Mgmt*, 1-22, 2-34
 - access control commands, (S) *DECnet Mgmt*, 3-71
 - account, (S) *Security*, 12-4; (S) *DECnet Mgmt*, 2-34
 - control, (S) *DECnet Mgmt*, 2-35
 - controlling system use, (S) *Sys Mgr Essentials*, 6-37
 - enabling access, (S) *DECnet Mgmt*, 2-35
 - establishing and managing, (S) *Security*, 12-5
- INCOMING PROXY parameter, (S) *DECnet Mgmt*, 2-35
 - key characteristic, (G) *User*, 19-9
- NET\$PROXY.DAT, (S) *Security*, 12-6
- NETPROXY.DAT, (S) *Security*, 12-6; (S) *DECnet Mgmt*, 2-35
- OUTGOING PROXY parameter, (S) *DECnet Mgmt*, 2-35
- PROXY parameter, (S) *DECnet Mgmt*, 2-36
- records, (S) *VMScluster Sys*, 5-18
- security benefits, (G) *User*, 19-7
- PROXY parameter, (S) *DECnet Intro*, 3-36
 - for SET OBJECT command, (S) *DECnet Mgmt*, 2-36
- \$PRTDEF macro, (P) *Interfaces*, B-14
- PRTSMB symbiont, (S) *Sys Mgr Essentials*, 13-3
 - on LAT printers, (S) *Sys Mgr Essentials*, 13-78
- PS (processor status)
 - evaluating, (P) *Alpha SDA*, SDA-45
 - examining, (P) *Alpha SDA*, SDA-49
- PSBs (procedure signature blocks), (P) *Linker*, LINK-21
- PSDNs (packet switching data networks), (S) *DECnet Mgmt*, 1-4
- PSECTs
 - See Program sections
- PSECT_ATTR= option, (P) *Linker*, LINK-60
 - controlling image section creation, (P) *Linker*, 3-22
- Pseudodevices, (S) *DECnet Mgmt*, 8-25
- Pseudoterminals
 - canceling request, (P) *I/O User*, 6-2
 - control connection routines, (P) *I/O User*, C-1
 - creating, (P) *I/O User*, 6-1
 - deleting, (P) *I/O User*, 6-2
 - device characteristics, (P) *I/O User*, 6-3
 - driver, (P) *I/O User*, 6-1
 - event notification, (P) *I/O User*, 6-6
 - features, (P) *I/O User*, 6-3
 - flow control, (P) *I/O User*, 6-5
 - I/O buffers, (P) *I/O User*, 6-3
 - programming example, (P) *I/O User*, 6-7
 - reading data, (P) *I/O User*, 6-5
 - using write with echo, (P) *I/O User*, 6-5
 - writing data, (P) *I/O User*, 6-5
- PSIGs (procedure signature information blocks), (P) *Calling Std*, 3-22
 - field conversions, (P) *Calling Std*, 3-25
- %PSL built-in symbol, (P) *Debugger*, 8-22, B-4
- /PSL qualifier, (P) *VAX SDA*, SDA-56
- PSLs (processor status longwords), (S) *DECcmds*, 3-21; (P) *Debugger*, 8-24
 - evaluating, (P) *VAX SDA*, SDA-26, SDA-53
 - examining, (P) *VAX SDA*, SDA-56
 - symbol, (P) *VAX SDA*, SDA-18
- PSM\$PRINT routine, (P) *Util Routines*, PSM-22
- PSM\$READ_ITEM_DX routine, (P) *Util Routines*, PSM-24
- PSM\$REPLACE routine, (P) *Util Routines*, PSM-26
- PSM\$REPORT routine, (P) *Util Routines*, PSM-31
- PSM\$_FUNNOTSUP routine, (P) *Util Routines*, PSM-35
- PSM routines, (P) *Util Routines*, PSM-1
 - examples, (P) *Util Routines*, PSM-17 to PSM-21
 - USER-FORMAT-ROUTINE, (P) *Util Routines*, PSM-34
 - USER-INPUT-ROUTINE, (P) *Util Routines*, PSM-38
 - USER-OUTPUT-ROUTINE, (P) *Util Routines*, PSM-44
- /PS qualifier, (P) *Alpha SDA*, SDA-49
- PS symbol, (P) *Alpha SDA*, SDA-15
- PST (process section table)
 - displaying, (P) *Alpha SDA*, SDA-128; (P) *VAX SDA*, SDA-149
- /PST qualifier, (P) *VAX SDA*, SDA-149
- PSWAPM privilege, (S) *Security*, A-14
- PSWRAP command, (G) *DCL N-Z*, DCLII-25
- PTA option, (P) *Rec Mgmt Util*, 4-14
- PTBR register
 - displaying, (P) *Alpha SDA*, SDA-87
- PTBR symbol, (P) *Alpha SDA*, SDA-15

- PTD\$CANCEL control connection routine, (P) *I/O User*, C-2
- PTD\$CREATE control connection routine, (P) *I/O User*, C-3
- PTD\$DELETE control connection routine, (P) *I/O User*, C-6
- PTD\$READ control connection routine, (P) *I/O User*, C-7
- PTD\$READW control connection routine, (P) *I/O User*, C-9
- PTD\$SET_EVENT_NOTIFICATION control connection routine, (P) *I/O User*, C-10
- PTD\$WRITE control connection routine, (P) *I/O User*, C-13
- /PTE qualifier, (P) *Alpha SDA*, SDA-45, SDA-49; (P) *VAX SDA*, SDA-53, SDA-56
- PTEs (page table entries)
extended addresses, (P) *Concepts*, 19-5
- PTF (product text file), (S) *Sys Mgr Essentials*, 3-20
- pthread.h, (P) *DECthreads*, B-2
- pthread_exc.h, (P) *DECthreads*, B-2
- pthread_once_t data structure, (P) *DECthreads*, pthread-63
- Publications about system dependability
See Bibliography
- Public databases
accessing, (S) *DECnet Intro*, 2-5
- Public directories
accessing, (S) *DECnet Intro*, 2-5
- Public volumes
conditions for using, (S) *Sys Mgr Essentials*, 8-8
- creating with SYSTEM qualifier, (S) *Sys Mgr Essentials*, 8-24
- definition, (S) *Sys Mgr Essentials*, 8-8
- initializing, (S) *Sys Mgr Essentials*, 8-12
- mounting, (S) *Sys Mgr Essentials*, 5-11, 8-20
- protecting, (S) *Sys Mgr Essentials*, 8-15
- setting protection, (S) *Sys Mgr Essentials*, 8-18
- PURGE CIRCUIT command, (S) *DECnet Mgmt Util*, 3-2
- PURGE command, (G) *User*, 4-15; (G) *DCL N-Z*, DCLII-26 to DCLII-29; (S) *DECnet Intro*, 3-10
- in Install utility, (S) *Sys Mgmt Util A-L*, 11-17
- in Mail, (G) *User*, 6-15
- in network operations, (S) *DECnet Intro*, 2-7
- NCP, (S) *Sys Mgr Tuning*, 21-11
- saving disk space, (S) *Sys Mgr Essentials*, 8-53
- to delete configuration database entries, (S) *DECnet Intro*, 3-34
- PURGE DEVICE command
in LANCP utility, (S) *Sys Mgmt Util A-L*, 12-20
- PURGE EXECUTOR command, (S) *DECnet Mgmt*, 3-14; (S) *DECnet Mgmt Util*, 3-6
- PURGE LINE command, (S) *DECnet Mgmt Util*, 3-12
- PURGE LOGGING command, (S) *DECnet Intro*, 4-6; (S) *DECnet Mgmt Util*, 3-16
- PURGE LOGGING EVENTS command, (S) *DECnet Mgmt Util*, 3-17
- PURGE LOGGING NAME command, (S) *DECnet Mgmt Util*, 3-19
- PURGE MODULE CONFIGURATOR command, (S) *DECnet Mgmt Util*, 3-20
- PURGE MODULE X25-ACCESS command, (S) *DECnet Mgmt Util*, 3-21
- PURGE MODULE X25-PROTOCOL command, (S) *DECnet Mgmt Util*, 3-22
- PURGE MODULE X25-SERVER command, (S) *DECnet Mgmt Util*, 3-25
- PURGE MODULE X29-SERVER command, (S) *DECnet Mgmt Util*, 3-25
- PURGE NODE CIRCUIT command, (S) *DECnet Mgmt Util*, 3-31
- PURGE NODE command, (S) *DECnet Intro*, 3-34; (S) *DECnet Mgmt Util*, 3-27
- in LANCP utility, (S) *Sys Mgmt Util A-L*, 12-20
- PURGE OBJECT command, (S) *DECnet Mgmt Util*, 3-32
- Purge Working Set fix, (S) *DECamds*, 4-5
- Push button pane
customizing buttons on, (P) *Debugger*, 3-28
- PUT attribute, (P) *Rec Mgmt Util*, 4-3, 4-36; (P) *File Appl*, 7-3, 7-4
- \$PUT macro
program example, (P) *RMS Ref*, A-27
- Put service, (P) *RMS Ref*, RMS-74 to RMS-78; (P) *File Appl*, 8-1, 8-3 to 8-4
- effect on next-record position, (P) *File Appl*, 8-17
- next record and, (P) *File Appl*, 8-17
- record-processing options, (P) *RMS Ref*, 6-18
- run-time options, (P) *File Appl*, 9-16 to 9-17
- Putting constraints into perspective, (S) *Dependable*, 4-3
- PXG, (P) *Environment*, 2-6
- 2P_CDDDB symbol, (P) *VAX SDA*, SDA-17
- 2P_UCB symbol, (P) *VAX SDA*, SDA-17

Q

- QDSKINTERVAL system parameter, (S) *VMSccluster Sys*, A-3
- QDSKVOTES system parameter, (S) *VMSccluster Sys*, 2-9, A-3
- \$QIO, (P) *I/O User*, 5-76

QMAN\$MASTER.DAT file, (S) *VMScluster Sys*, 7-3

authorization elements, (S) *VMScluster Sys*, 5-13

QMAN\$MASTER logical name, (S) *Sys Mgr Essentials*, 12-6

defining during system startup, (S) *Sys Mgr Essentials*, 5-8

defining to reduce system disk I/O, (S) *Sys Mgr Tuning*, 16-8

QNA device, (S) *DECnet Intro*, 3-33

/QUAD qualifier, (P) *Alpha SDA*, SDA-151

/QUADWORD qualifier, (P) *Debugger*, 15-6, 15-7

quadword_signed data type, (P) *Interfaces*, B-14

quadword_unsigned data type, (P) *Interfaces*, B-14

Qualifiers

command, (S) *Sys Mgmt Util A-L*, 7-7

conflicting, (G) *User*, 3-10

date formats, (G) *User*, 3-11

in DCL command lines, (G) *User*, 3-3

input file-selection, (S) *Sys Mgmt Util A-L*, 7-7

input save-set, (S) *Sys Mgmt Util A-L*, 7-7

output file, (S) *Sys Mgmt Util A-L*, 7-7

output save-set, (S) *Sys Mgmt Util A-L*, 7-7

parameter, (G) *User*, 3-9

positional, (G) *User*, 3-9

position-dependent, (S) *Sys Mgmt Util A-L*, 7-7

requiring special privileges, (S) *Sys Mgmt Util M-Z*, 2-6

specifying values, (G) *User*, 3-10

time formats, (G) *User*, 3-11

Quality metrics and mindsets, (S) *Dependable*, 3-10

Quantum

allocating to process, (S) *VAX Perform*, 3-9

QUANTUM system parameter, (S) *Sys Mgr Tuning*, 26-8; (S) *Alpha Perform*, 6-19

increasing, (S) *VAX Perform*, 5-17; (S) *Alpha Perform*, 19-2

Queue access routines, (P) *Concepts*, 6-13

Queue and journal files, (G) *DCL N-Z*, DCLII-378

Queue characteristics

canceling, (S) *Sys Mgr Essentials*, 13-59

commands for managing, (S) *Sys Mgr Essentials*, 13-57

defining, (S) *Sys Mgr Essentials*, 13-58

definition, (S) *Sys Mgr Essentials*, 13-28

deleting, (S) *Sys Mgr Essentials*, 13-59

obtaining information about, (S) *Sys Mgr Essentials*, 13-51, 13-59

problems

deleting, (S) *Sys Mgr Essentials*, 13-82

mismatch, (S) *Sys Mgr Essentials*, 13-81

sample use of, (S) *Sys Mgr Essentials*, 13-28

specifying

on a job, (S) *Sys Mgr Essentials*, 13-28

Queue characteristics

specifying (cont'd)

on a queue, (S) *Sys Mgr Essentials*, 13-19, 13-28, 13-59

storage of in queue database, (S) *Sys Mgr Essentials*, 13-17

Queue commands, (G) *SW Overview*, 3-12

affected by multiple queue managers, (S) *Sys Mgr Essentials*, 12-4

creating a queue database, (S) *Sys Mgr Essentials*, 12-7

creating queues, (S) *Sys Mgr Essentials*, 13-48

deleting queues, (S) *Sys Mgr Essentials*, 13-57

displaying information about the queue manager, (S) *Sys Mgr Essentials*, 12-11

displaying jobs, (S) *Sys Mgr Essentials*, 13-68

displaying queues, (S) *Sys Mgr Essentials*, 13-49

enabling autostart, (S) *Sys Mgr Essentials*, 13-16, 13-18, 13-48

managing banner pages, (S) *Sys Mgr Essentials*, 13-60

managing characteristics, (S) *Sys Mgr Essentials*, 13-57

managing device control libraries, (S) *Sys Mgr Essentials*, 13-65

managing forms and stock, (S) *Sys Mgr Essentials*, 13-61

managing queues, (S) *Sys Mgr Essentials*, 13-46

modifying jobs, (S) *Sys Mgr Essentials*, 13-70

modifying queues, (S) *Sys Mgr Essentials*, 13-53

pausing queues, (S) *Sys Mgr Essentials*, 13-53

relationship between starting and enabling autostart, (S) *Sys Mgr Essentials*, 13-4

setting UIC-based protection, (S) *Sys Mgr Essentials*, 13-23

showing UIC-based protection, (S) *Sys Mgr Essentials*, 13-23

specifying options, (S) *Sys Mgr Essentials*, 13-19, 13-31

starting queues

autostart, (S) *Sys Mgr Essentials*, 13-16, 13-18

nonautostart, (S) *Sys Mgr Essentials*, 13-17, 13-48

starting the queue manager, (S) *Sys Mgr Essentials*, 12-7

caution, (S) *Sys Mgr Essentials*, 12-8

creating an additional queue manager, (S) *Sys Mgr Essentials*, 12-10

restarting, (S) *Sys Mgr Essentials*, 12-9

specifying failover list, (S) *Sys Mgr Essentials*, 12-9

specifying name of queue manager, (S) *Sys Mgr Essentials*, 12-10

- Queue commands
 - starting the queue manager (cont'd)
 - specifying nodes to run the queue manager, (S) *Sys Mgr Essentials*, 12-6
 - stopping
 - all queues on a node, (S) *Sys Mgr Essentials*, 12-9
 - queues, (S) *Sys Mgr Essentials*, 13-49, 13-54
 - the queue manager, (S) *Sys Mgr Essentials*, 12-9
- Queue configurations
 - sample batch queuing system, (S) *Sys Mgr Essentials*, 13-4 to 13-7
 - sample output queuing environment, (S) *Sys Mgr Essentials*, 13-8 to 13-14
- Queue database, (S) *VMScluster Sys*, 7-2
 - closing, (S) *Sys Mgr Essentials*, 12-9
 - closing files, (G) *DCL N-Z, DCLII-393*
 - creating, (S) *Sys Mgr Essentials*, 12-7
 - default location, (S) *Sys Mgr Essentials*, 12-5
 - definition, (S) *Sys Mgr Essentials*, 12-4
 - detection of queue corruption, (S) *Sys Mgr Essentials*, 13-84
 - determining location, (S) *Sys Mgr Essentials*, 12-7
 - determining location of master file, (S) *Sys Mgr Essentials*, 12-5
 - determining location of queue and journal file, (S) *Sys Mgr Essentials*, 12-6
 - files comprising, (S) *Sys Mgr Essentials*, 12-4
 - for multiple queue managers, (S) *Sys Mgr Essentials*, 12-4, 12-5
 - naming convention, (S) *Sys Mgr Essentials*, 12-5
 - function, (S) *Sys Mgr Essentials*, 12-4
 - logical name defining location, (S) *Sys Mgr Essentials*, 5-8
 - managing, (S) *Sys Mgr Essentials*, 12-1
 - mounting the disk holding, (S) *Sys Mgr Essentials*, 12-6
 - moving, (S) *Sys Mgr Essentials*, 12-5
 - moving to reduce system disk I/O, (S) *Sys Mgr Tuning*, 16-8
 - requirement in a VMScluster environment, (S) *Sys Mgr Essentials*, 12-5, 12-6
 - restoring a damaged, (S) *Sys Mgr Essentials*, 12-12
 - saving, (S) *Sys Mgr Essentials*, 12-11
 - specifying location, (S) *Sys Mgr Essentials*, 12-5
- Queue failover, (S) *Sys Mgr Essentials*, 13-4
- Queue file of queue database, (S) *Sys Mgr Essentials*, 12-4
 - location, (S) *Sys Mgr Essentials*, 12-6, 12-7
 - changing, (S) *Sys Mgr Essentials*, 12-6
 - saving, (S) *Sys Mgr Essentials*, 12-12
- Queue files
 - detection of corruption, (S) *Sys Mgr Essentials*, 13-84
- Queue forms
 - See Forms
- Queue I/O request system service, (P) *File Appl*, 7-4, 9-13
- Queue I/O services
 - \$QIO call, (P) *File Appl*, 1-18
- Queue information
 - obtaining, (P) *LIB\$, LIB-204*
- Queue managers
 - automatic restart, (S) *Sys Mgr Essentials*, 12-3, 12-7, 12-9, 12-17
 - availability, (S) *VMScluster Sys*, 7-3
 - availability of, (S) *Sys Mgr Essentials*, 12-9, 12-17
 - clusterwide, (S) *Dependable*, 8-28; (S) *VMScluster Sys*, 7-1
 - communication with job controller, (S) *Sys Mgr Essentials*, 12-3
 - creating an additional, (S) *Sys Mgr Essentials*, 12-10
 - database, (S) *VMScluster Sys*, 7-2
 - default name, (S) *Sys Mgr Essentials*, 12-4
 - definition, (S) *Sys Mgr Essentials*, 12-1
 - displaying information about, (S) *Sys Mgr Essentials*, 12-11
 - failover, (G) *DCL N-Z, DCLII-379*; (S) *Sys Mgr Essentials*, 12-3, 12-17; (S) *Dependable*, 9-18; (S) *VMScluster Sys*, 7-3
 - forcing, (S) *Sys Mgr Essentials*, 12-9
 - list of nodes for, (S) *Sys Mgr Essentials*, 12-9, 12-17
 - function, (S) *Sys Mgr Essentials*, 12-1; (S) *VMScluster Sys*, 7-1
 - improving performance, (S) *Sys Mgr Essentials*, 12-13
 - limiting nodes that can run, (S) *Sys Mgr Essentials*, 12-9
 - managing, (S) *Sys Mgr Essentials*, 12-1
 - moving to another node in a VMScluster system, (S) *Sys Mgr Essentials*, 12-10
 - multiple, (S) *Sys Mgr Essentials*, 12-3, 12-10
 - commands affected by, (S) *Sys Mgr Essentials*, 12-4
 - managing queues with, (S) *Sys Mgr Essentials*, 12-10
 - moving a queue to another queue manager, (S) *Sys Mgr Essentials*, 12-10
 - restriction, (S) *Sys Mgr Essentials*, 12-3
 - specifying queue manager name, (S) *Sys Mgr Essentials*, 12-4, 12-10
 - naming, (S) *Sys Mgr Essentials*, 12-10
 - nodes eligible to run, (S) *VMScluster Sys*, 7-3
 - relationship to queues, (S) *Sys Mgr Essentials*, 12-1

Queue managers (cont'd)

- restarting, (G) *DCL N-Z*, DCLII-379, DCLII-393; (S) *Sys Mgr Essentials*, 12-9
- role in queuing process, (S) *Sys Mgr Essentials*, 12-2, 13-2
- print jobs, (S) *Sys Mgr Essentials*, 13-3
- role in starting active autostart queues, (S) *Sys Mgr Essentials*, 13-4
- specifying name of, (S) *Sys Mgr Essentials*, 12-10
- specifying preferred order in which nodes run, (S) *Sys Mgr Essentials*, 12-9
- starting, (G) *DCL N-Z*, DCLII-378
- starting initially, (S) *Sys Mgr Essentials*, 12-7
- stopping, (G) *DCL N-Z*, DCLII-393; (S) *Sys Mgr Essentials*, 12-9
- troubleshooting, (S) *Sys Mgr Essentials*, 12-14

Queue master file

- logical name defining location, (S) *Sys Mgr Essentials*, 5-8

Queue names

- default for batch queue, (S) *Sys Mgr Essentials*, 13-5
- default for print queue, (S) *Sys Mgr Essentials*, 13-8
- defining, (S) *Sys Mgr Essentials*, 13-15

Queue options, (S) *Sys Mgr Essentials*, 13-18

- assigning, (G) *DCL N-Z*, DCLII-366
 - banner pages, (S) *Sys Mgr Essentials*, 13-33
 - changing, (G) *DCL A-M*, DCLI-258; (G) *DCL N-Z*, DCLII-366
 - characteristics, (S) *Sys Mgr Essentials*, 13-28
 - controlling job performance and resources, (S) *Sys Mgr Essentials*, 13-28
 - controlling page and line overflow, (S) *Sys Mgr Essentials*, 13-43
 - device control libraries, (S) *Sys Mgr Essentials*, 13-44
 - forms, (S) *Sys Mgr Essentials*, 13-42
 - qualifiers for specifying, (S) *Sys Mgr Essentials*, 13-19 to 13-22
 - restricting access, (S) *Sys Mgr Essentials*, 13-22
 - retaining jobs, (S) *Sys Mgr Essentials*, 13-26
- Queues, (P) *Concepts*, 6-12; (P) *LIB\$, LIB-277*; (P) *DECthreads*, 2-18

See also Autostart queues, Batch queues, Execution queues, Generic queues, Output queues, and Print queues

access granted by OPER privilege, (S) *Security*, 4-29

ACL access rights, (S) *Security*, 5-17

activating autostart, (G) *DCL A-M*, DCLI-202; (G) *DCL N-Z*, DCLII-366; (S) *Sys Mgr Essentials*, 13-15, 13-16, 13-49

allowing jobs to complete before shutdown, (S) *Sys Mgr Essentials*, 13-55

as protected objects, (S) *Security*, 4-10

Queues (cont'd)

- assigning, (G) *DCL A-M*, DCLI-258
- assigning a default form, (S) *Sys Mgr Essentials*, 13-63
- assigning device control libraries, (S) *Sys Mgr Essentials*, 13-66
- assigning logical names to, (G) *DCL A-M*, DCLI-47
- assigning to devices, (G) *DCL A-M*, DCLI-47
- automatic failover, (S) *Dependable*, 9-18
- autostart, (G) *DCL A-M*, DCLI-261; (G) *DCL N-Z*, DCLII-367
- availability of, (S) *Sys Mgr Essentials*, 13-4, 13-15
- changing DEFAULT form, (S) *Sys Mgr Essentials*, 13-63
- changing entries for batch and printer jobs, (G) *DCL N-Z*, DCLII-133
- changing options on, (G) *DCL A-M*, DCLI-258; (G) *DCL N-Z*, DCLII-366; (S) *Sys Mgr Essentials*, 13-53
- characteristics, (S) *Sys Mgr Essentials*, 13-28
- closing, (S) *Sys Mgr Essentials*, 13-53
- common command procedure, (S) *VMScluster Sys*, 7-14
- controlling, (G) *SW Overview*, 3-18; (S) *VMScluster Sys*, 7-1
- creating, (G) *DCL A-M*, DCLI-258; (S) *Sys Mgr Essentials*, 13-15, 13-48; (P) *DECthreads*, *cmalib-7*
- autostart execution, (S) *Sys Mgr Essentials*, 13-15, 13-16
- generic, (S) *Sys Mgr Essentials*, 13-17
- nonautostart execution, (S) *Sys Mgr Essentials*, 13-16
- creating an attributes object for, (P) *DECthreads*, *cmalib-3*
- creating and managing asynchronously, (P) *Sys Svc II*, SYS2-305
- creating and managing synchronously, (P) *Sys Svc II*, SYS2-362
- deactivating autostart, (G) *DCL N-Z*, DCLII-394, DCLII-398
- deassigning, (G) *DCL A-M*, DCLI-110
- defining a form, (S) *Sys Mgr Essentials*, 13-61
- defining CPU time limit for batch jobs, (G) *DCL A-M*, DCLI-263; (G) *DCL N-Z*, DCLII-197, DCLII-369
- defining default working sets for batch jobs, (G) *DCL A-M*, DCLI-270, DCLI-280; (G) *DCL N-Z*, DCLII-201, DCLII-375, DCLII-412
- defining working set extent for batch jobs, (G) *DCL A-M*, DCLI-270, DCLI-280; (G) *DCL N-Z*, DCLII-201, DCLII-375, DCLII-413
- defining working set quotas for batch jobs, (G) *DCL A-M*, DCLI-280; (G) *DCL N-Z*, DCLII-202, DCLII-413

Queues (cont'd)

deleting, (S) *Sys Mgr Essentials*, 13-57; (P) *DECthreads*, cmalib-8

deleting a job in, (S) *Sys Mgr Essentials*, 13-74

deleting an attributes object for, (P) *DECthreads*, cmalib-4

deleting batch or print, (G) *DCL A-M*, DCLI-143

deleting entries, (G) *DCL A-M*, DCLI-136

designating as autostart, (G) *DCL A-M*, DCLI-260

disabled, (S) *Sys Mgr Essentials*, 13-84

disabling autostart, (G) *DCL A-M*, DCLI-174; (G) *DCL N-Z*, DCLII-400

displaying default characteristics of system print queues, (G) *DCL N-Z*, DCLII-309

displaying device entries, (G) *DCL N-Z*, DCLII-275, DCLII-320

displaying entries, (G) *DCL N-Z*, DCLII-320

displaying information about, (S) *Sys Mgr Essentials*, 13-49

ensuring availability of, (G) *DCL A-M*, DCLI-261; (G) *DCL N-Z*, DCLII-367

entry insertion, (P) *LIB\$*, LIB-274

establishing a print queue as spooled, (G) *DCL N-Z*, DCLII-121

establishing base priority for batch jobs, (G) *DCL N-Z*, DCLII-196

establishing base priority for jobs, (G) *DCL A-M*, DCLI-261

events audited, (S) *Security*, 5-18

execution of, (G) *DCL A-M*, DCLI-259; (P) *Util Routines*, PSM-3

designating autostart or nonautostart, (G) *DCL A-M*, DCLI-260

failover of, (G) *DCL A-M*, DCLI-261; (G) *DCL N-Z*, DCLII-367; (S) *Sys Mgr Essentials*, 13-15

forms, (S) *Sys Mgr Essentials*, 13-42

gathering information with F\$GETQUI, (S) *Sys Mgr Essentials*, 13-51

getting information, (P) *Concepts*, 5-21

getting information asynchronously, (P) *Sys Svc II*, SYS2-3

getting information synchronously, (P) *Sys Svc II*, SYS2-46

holding and releasing jobs, (S) *Sys Mgr Essentials*, 13-71

in a VMScluster environment, (S) *Sys Mgr Tuning*, 20-2

initializing, (G) *DCL A-M*, DCLI-258; (S) *Sys Mgr Essentials*, 13-48

inserting an element at the end of, (P) *DECthreads*, cmalib-10, cmalib-13, cmalib-15

inserting an element at the front of, (P) *DECthreads*, cmalib-11, cmalib-14

lock management, (P) *Concepts*, 15-6

Queues (cont'd)

logical, (G) *DCL A-M*, DCLI-260

managing with multiple queue managers, (S) *Sys Mgr Essentials*, 12-10

merging, (S) *Sys Mgr Essentials*, 13-56

merging jobs, (G) *DCL A-M*, DCLI-46

modifying, (S) *Sys Mgr Essentials*, 13-53

modifying characteristics of a print queue, (G) *DCL N-Z*, DCLII-182

monitoring, (S) *Sys Mgr Essentials*, 13-49

mounting a form on, (S) *Sys Mgr Essentials*, 13-42, 13-64

moving jobs from one queue to another, (S) *Sys Mgr Essentials*, 13-57

moving to another queue manager, (S) *Sys Mgr Essentials*, 12-10

obtaining size of, (P) *DECthreads*, cmalib-5

on standalone workstations

batch, (S) *Sys Mgr Essentials*, 13-5

output, (S) *Sys Mgr Essentials*, 13-8

pausing, (G) *DCL N-Z*, DCLII-388; (S) *Sys Mgr Essentials*, 13-53

preparing for a shutdown, (G) *DCL N-Z*, DCLII-401

preventing failover, (G) *DCL A-M*, DCLI-174

privilege requirements, (S) *Security*, 5-18

problems deleting, (S) *Sys Mgr Essentials*, 13-82

profile storage, (S) *Security*, 5-18

protection, (S) *Sys Mgr Essentials*, 13-22 to 13-26; (P) *Sys Svc II*, SYS2-355

protection code access rights, (S) *Security*, 5-17

reinitializing existing, (G) *DCL A-M*, DCLI-258; (S) *Sys Mgr Essentials*, 13-53

releasing from paused states, (G) *DCL N-Z*, DCLII-388

removing an element from, (P) *DECthreads*, cmalib-9, cmalib-12

removing jobs from, (G) *DCL A-M*, DCLI-46

requeuing

executing job, (S) *Sys Mgr Essentials*, 13-73

pending job, (S) *Sys Mgr Essentials*, 13-73

restarting, (G) *DCL N-Z*, DCLII-366, DCLII-394, DCLII-398

restarting after deactivating for autostart, (G) *DCL N-Z*, DCLII-394, DCLII-398

restarting batch, (S) *Dependable*, 9-19

security elements of, (S) *Security*, 5-17

self-relative, (P) *Concepts*, 6-12

server, (G) *DCL A-M*, DCLI-260

setting size of, (P) *DECthreads*, cmalib-6

setting up for failover, (G) *DCL A-M*, DCLI-261; (G) *DCL N-Z*, DCLII-367

simplifying startup, (S) *Sys Mgr Essentials*, 13-4

single-computer and cluster, (S) *VMScluster Sys*, 7-1

Queues (cont'd)

- spooling printers, (S) *Sys Mgr Essentials*, 7-14, 13-14
 - stalled
 - status of, (S) *Sys Mgr Essentials*, 13-79, 13-81
 - troubleshooting, (S) *Sys Mgr Essentials*, 13-81
 - starting, (G) *DCL N-Z*, DCLII-366
 - autostart, (S) *Sys Mgr Essentials*, 13-48
 - in startup command procedure, (S) *Sys Mgr Essentials*, 13-18
 - in system startup, (S) *Sys Mgr Essentials*, 5-12
 - nonautostart, (S) *Sys Mgr Essentials*, 13-16, 13-48
 - starting autostart, (G) *DCL A-M*, DCLI-202; (G) *DCL N-Z*, DCLII-366
 - starting queue managers, (G) *DCL N-Z*, DCLII-378
 - startup command procedure, (S) *Sys Mgr Essentials*, 5-12
 - sample, (S) *Sys Mgr Essentials*, 13-18
 - stepping through, (P) *Alpha SDA*, SDA-64; (P) *VAX SDA*, SDA-68
 - stopped
 - status of, (S) *Sys Mgr Essentials*, 13-79
 - stopping, (G) *DCL N-Z*, DCLII-366, DCLII-394, DCLII-398; (S) *Sys Mgr Essentials*, 13-54
 - abruptly, (S) *Sys Mgr Essentials*, 13-54
 - all, (G) *DCL N-Z*, DCLII-400
 - all on a node, (S) *Sys Mgr Essentials*, 13-55
 - before shutdown, (G) *DCL A-M*, DCLI-174; (G) *DCL N-Z*, DCLII-400; (S) *Sys Mgr Essentials*, 13-55
 - queue managers, (G) *DCL N-Z*, DCLII-393
 - smoothly, (S) *Sys Mgr Essentials*, 13-54
 - symbionts, (G) *DCL A-M*, DCLI-260
 - template profiles, (S) *Security*, 5-17
 - types of, (G) *DCL A-M*, DCLI-259; (S) *Sys Mgr Essentials*, 13-2; (P) *Sys Svc II*, SYS2-352
 - output execution, (S) *Sys Mgr Essentials*, 13-3
 - types of access, (S) *Security*, 5-17
 - validating, (P) *Alpha SDA*, SDA-160; (P) *VAX SDA*, SDA-185
- Queue status, (S) *Sys Mgr Essentials*, 13-49, 13-50
- determining, (S) *Sys Mgr Essentials*, 13-78
- Queuing ACMS, (S) *Dependable*, 8-57
- Queuing remote files
- for printing, (S) *DECnet Intro*, 2-6
- Queuing system
- See Batch and print queuing system

- QUIT command, (P) *Debugger*, 5-10
- multiprocess program, (P) *Debugger*, 14-9, 14-10
- Quorum, (P) *Alpha SDA*, SDA-80
- adding or removing voting members, (S) *VMScluster Sys*, 8-33
 - algorithm, (S) *VMScluster Sys*, 2-6
 - calculating cluster votes, (S) *VMScluster Sys*, 2-6
 - changing expected votes, (S) *VMScluster Sys*, 10-22
 - enabling a quorum disk watcher, (S) *VMScluster Sys*, 2-9
 - EXPECTED_VOTES system parameter, (S) *VMScluster Sys*, 2-6, 10-22
 - reasons for loss, (S) *VMScluster Sys*, C-16
 - restoring after unexpected computer failure, (S) *VMScluster Sys*, 10-21
 - setting parameters on voting members, (S) *VMScluster Sys*, 2-6
 - system parameters, (S) *VMScluster Sys*, 2-6
 - VOTES system parameter, (S) *VMScluster Sys*, 2-6
- QUORUM.DAT file, (S) *VMScluster Sys*, 2-10
- Quorum disk
- See also VMScluster environments, quorum disk, and VMScluster systems, quorum disk
 - adding, (S) *VMScluster Sys*, 8-18
 - adjusting EXPECTED_VOTES, (S) *VMScluster Sys*, 8-36
 - disabling, (S) *VMScluster Sys*, 8-21, 8-33
 - enabling, (S) *VMScluster Sys*, 8-33
 - in sample configuration, (S) *VMScluster Sys*, 3-14
 - mounting, (S) *VMScluster Sys*, 2-10
 - QUORUM.DAT file, (S) *VMScluster Sys*, 2-10
 - restricted from shadow sets, (S) *VMScluster Sys*, 6-23
- Quorum disk watcher
- enabling, (S) *VMScluster Sys*, 2-9
 - mounting the quorum disk, (S) *VMScluster Sys*, 2-10
 - system parameters, (S) *VMScluster Sys*, 2-9
- Quorum fix, (S) *DECamds*, 4-1
- Quota checking
- controlling, (S) *Sys Mgmt Util M-Z*, 2-32
- Quota file
- Analyze/Disk_Structure utility creates version, (S) *Sys Mgr Tuning*, A-9
 - contents, (S) *Sys Mgr Essentials*, 8-49
 - creating, (S) *Sys Mgr Essentials*, 8-51; (S) *Sys Mgmt Util M-Z*, 6-23
 - deleting, (S) *Sys Mgr Essentials*, 8-53
 - disabling, (S) *Sys Mgr Essentials*, 8-53; (S) *Sys Mgmt Util M-Z*, 6-23
 - displaying, (S) *Sys Mgmt Util M-Z*, 6-29
 - enabling, (S) *Sys Mgmt Util M-Z*, 6-25
 - modifying, (S) *Sys Mgmt Util M-Z*, 6-25

Quota file (cont'd)

- QUOTA.SYS, (S) *Sys Mgr Tuning*, A-9
- removing an entry, (S) *Sys Mgmt Util M-Z*, 6-23, 6-27
- requirements for, (S) *Sys Mgr Essentials*, 8-51
- reserved file, (S) *Sys Mgr Tuning*, A-9
- UIC [0,0] in, (S) *Sys Mgr Essentials*, 8-49
- updating, (S) *Sys Mgr Essentials*, 8-53; (S) *Sys Mgmt Util M-Z*, 6-26
- Quota file transfer block, (P) *I/O User*, 1-35
- /QUOTA qualifier
 - in Mount utility, (S) *Sys Mgmt Util M-Z*, 2-32
- Quotas, (P) *Interfaces*, B-12
 - See also Disk quotas and Process quotas
 - assigning process, (G) *DCL N-Z*, DCLII-56
 - AST, (P) *Concepts*, 9-3; (P) *I/O User*, 2-27, 3-10, 4-5, 4-12, 5-44
 - AST limit, (G) *DCL N-Z*, DCLII-58
 - batch jobs
 - working set, (G) *DCL N-Z*, DCLII-413
 - buffered I/O, (P) *Concepts*, 9-3; (P) *I/O User*, 2-27, 3-10, 4-5
 - buffered I/O byte count, (P) *Concepts*, 9-3
 - BYTELIM, (P) *I/O User*, 1-11
 - controlling checking, (S) *Sys Mgmt Util M-Z*, 2-32
- CPU
 - for created processes, (G) *DCL N-Z*, DCLII-62
- direct I/O, (P) *Concepts*, 9-3; (P) *I/O User*, 2-27, 3-10
- establishing, (P) *Concepts*, 10-11
- I/O operations, (P) *Concepts*, 9-2
- in use jobs, (S) *DECams*, 3-25
- limit fix, (S) *DECams*, 4-3
- mailbox buffer, (P) *I/O User*, 4-1, 4-3, 4-5
- of subprocesses process can create, (G) *DCL N-Z*, DCLII-62
- pipeline, (S) *DECnet Mgmt*, 2-24, 3-58; (S) *DECnet Mgmt Util*, 3-69
- process, (G) *Compatibility*, 1-6
- process account quota requirements, (S) *DECams*, A-3
- process mode, (S) *DECams*, 3-24
- recommended for processes, (S) *DECams*, 5-15
- required to run UETP, (S) *Sys Mgr Tuning*, 17-23
- SS\$_EXQUOTA condition value, (P) *Concepts*, 13-21
- system service resources, (P) *Interfaces*, 4-2
- to run Data Analyzer node, (S) *DECams*, A-14
- working set
 - for batch jobs, (G) *DCL N-Z*, DCLII-413
 - modifying, (G) *DCL N-Z*, DCLII-239

Quotation marks (" ")

- ASCII string delimiter, (P) *Debugger*, 8-16
- for access control string in equivalence name, (S) *DECnet Intro*, 2-4
- in character strings, (G) *User*, 16-10
- in remote file specifications, (S) *TCP/IP*, 5-6; (S) *DECnet Intro*, 2-3
- instruction delimiter, (P) *Debugger*, 8-21
- in task specification string, (S) *DECnet Intro*, 2-14

R

R0 register

- use by control block store macros, (P) *RMS Ref*, A-7
- use in asynchronous operations, (P) *RMS Ref*, 2-5
- RA60 disk, (P) *I/O User*, 2-3
- RA70 disk, (P) *I/O User*, 2-3
- RA90 disk, (P) *I/O User*, 2-3
- RAB\$B_BID field, (P) *RMS Ref*, 6-2
- RAB\$B_BLN field, (P) *RMS Ref*, 6-3
- RAB\$B_KRF field, (P) *RMS Ref*, 6-4; (P) *File Appl*, 9-12, 9-14
 - for selecting key path, (P) *RMS Ref*, A-23
- RAB\$B_KSZ
 - used with performance caching optimization, (P) *RMS Ref*, 6-15
- RAB\$B_KSZ field, (P) *RMS Ref*, 6-4; (P) *File Appl*, 8-7, 8-8, 8-14, 9-12, 9-14, 9-16
 - use with limit option, (P) *RMS Ref*, 6-14
 - use with search key, (P) *RMS Ref*, 6-13, 6-14
- RAB\$B_MBC field, (P) *RMS Ref*, 6-6 to 6-7; (P) *File Appl*, 3-14, 3-15, 7-17, 9-9
 - for establishing global buffer size in shared sequential file operations, (P) *RMS Ref*, 4-19
- RAB\$B_MBF field, (P) *RMS Ref*, 6-7; (P) *File Appl*, 3-14, 3-27, 9-9
- RAB\$B_PSZ field, (P) *RMS Ref*, 6-8
- RAB\$B_RAC field, (P) *RMS Ref*, 6-8
 - RAB\$C_KEY option, (P) *File Appl*, 8-6, 9-9, 9-15, 9-16
 - RAB\$C_RFA option, (P) *File Appl*, 8-6, 9-9, 9-15, 9-16
 - RAB\$C_SEQ option, (P) *File Appl*, 8-6, 9-9, 9-15, 9-16
- RAB\$B_TMO field, (P) *RMS Ref*, 6-21 to 6-22; (P) *File Appl*, 7-12, 7-13, 9-15
 - use with timeout option for terminal operation, (P) *RMS Ref*, 6-20
- RAB\$C_KEY option, (P) *RMS Ref*, 6-9
- RAB\$C_RFA option, (P) *RMS Ref*, 6-9
- RAB\$C_SEQ option, (P) *RMS Ref*, 6-8
- RAB\$L_BKT field, (P) *RMS Ref*, 6-2

- RAB\$L_CTX field, (P) RMS Ref, 6-3
- RAB\$L_FAB field, (P) RMS Ref, 6-3
- RAB\$L_KBF field, (P) RMS Ref, 6-3; (P) File Appl, 8-7, 8-8, 8-14, 9-12, 9-14, 9-16
 - use with limit option, (P) RMS Ref, 6-14
 - use with search key, (P) RMS Ref, 6-13, 6-14
- RAB\$L_PBF field, (P) RMS Ref, 6-8
- RAB\$L_RBF field, (P) RMS Ref, 3-4, 6-9, A-15; (P) File Appl, 9-17, 9-18
- RAB\$L_RBZ field, (P) File Appl, 9-17
- RAB\$L_RHB field, (P) RMS Ref, 6-10; (P) File Appl, 9-15, 9-17, 9-18
- RAB\$L_ROP field, (P) RMS Ref, 6-10; (P) File Appl, 9-6
 - RAB\$V_ASY option, (P) File Appl, 8-18, 8-19, 9-8, 9-13, 9-16, 9-18
 - RAB\$V_EOF option, (P) File Appl, 8-15, 8-17, 9-10
 - RAB\$V_EQNXT option, (P) File Appl, 9-11, 9-14
 - RAB\$V_FDL option, (P) File Appl, 9-8, 9-11, 9-18
 - RAB\$V_KGE option, (P) File Appl, 8-8, 8-9
 - RAB\$V_KGT option, (P) File Appl, 8-8, 8-9
 - RAB\$V_LIM option, (P) File Appl, 9-12, 9-14
 - RAB\$V_LOA option, (P) File Appl, 9-12, 9-16
 - RAB\$V_LOC option, (P) File Appl, 9-9, 9-14
 - RAB\$V_NLK option, (P) File Appl, 7-11, 9-14
 - RAB\$V_NXR option, (P) File Appl, 7-14, 8-8, 9-14
 - RAB\$V_NXT option, (P) File Appl, 9-12, 9-14
 - RAB\$V_RAH option, (P) File Appl, 3-15, 9-9, 9-15
 - RAB\$V_REA option, (P) File Appl, 7-11, 9-14
 - RAB\$V_RLK option, (P) File Appl, 7-11, 9-15, 9-16
 - RAB\$V_RRL option, (P) File Appl, 7-12, 9-15
 - RAB\$V_TMO option, (P) File Appl, 7-12, 7-13, 9-15, 9-17
 - RAB\$V_TPT option, (P) File Appl, 9-10, 9-17
 - RAB\$V_UIF option, (P) File Appl, 8-4, 8-7, 9-10, 9-17
 - RAB\$V_ULK option, (P) File Appl, 7-14, 9-15
 - RAB\$V_WAT option, (P) File Appl, 7-12, 9-16
 - RAB\$V_WBH option, (P) File Appl, 3-15, 9-9, 9-17
- RAB\$L_STS field, (P) RMS Ref, 6-21
- RAB\$L_STV0 field, (P) RMS Ref, RMS-51
- RAB\$L_STV field, (P) RMS Ref, 6-21
 - for returning I/O status block, (P) RMS Ref, RMS-51
 - for returning I/O status block from Put service, (P) RMS Ref, RMS-78
 - for returning process identification (PID), (P) RMS Ref, RMS-51, RMS-75
 - for returning record length, (P) RMS Ref, RMS-55
 - using with Get service, (P) RMS Ref, RMS-52
- RAB\$L_UBF field, (P) RMS Ref, 6-22; (P) File Appl, 9-15
- RAB\$L_USZ field, (P) File Appl, 9-16
- RAB\$L_XAB field, (P) RMS Ref, 6-23
 - requirement for using XABTRM, (P) RMS Ref, 17-1
- RAB\$V_ASY option, (P) RMS Ref, 6-12, 6-16
- RAB\$V_BIO option, (P) RMS Ref, 6-12
- RAB\$V_CCO option, (P) RMS Ref, 6-20
- RAB\$V_CDK option, (P) RMS Ref, 6-16
- RAB\$V_CVT option, (P) RMS Ref, 6-20
- RAB\$V_EOF option, (P) RMS Ref, 6-12
- RAB\$V_EQNXT option, (P) RMS Ref, 6-13
 - specifying key match method, (P) RMS Ref, 6-5, 6-6
 - used with reverse-search (RAB\$V_REV) option, (P) RMS Ref, 6-15
- RAB\$V_ETO option
 - required to use XABTRM, (P) RMS Ref, 17-1
- RAB\$V_FDL option, (P) RMS Ref, 6-16
- RAB\$V_KGE option
 - See RAB\$V_EQNXT option
- RAB\$V_KGT option
 - See RAB\$V_NXT option
- used with reverse-search (RAB\$V_REV) option, (P) RMS Ref, 6-15
- RAB\$V_LIM option, (P) RMS Ref, 6-14
- RAB\$V_LOA option, (P) RMS Ref, 6-14
 - determining fill size, (P) RMS Ref, 12-10
 - example of use, (P) RMS Ref, A-19
 - use restriction, (P) RMS Ref, 12-4, 12-10
- RAB\$V_LOC option, (P) RMS Ref, 6-16
 - use restriction, (P) RMS Ref, 6-17
- RAB\$V_NLK option, (P) RMS Ref, 6-18
- RAB\$V_NXR option, (P) RMS Ref, 6-18
- RAB\$V_NXT option, (P) RMS Ref, 6-14
 - specifying key match method, (P) RMS Ref, 6-5, 6-6
- RAB\$V_PMT option, (P) RMS Ref, 6-20
- RAB\$V_PTA option, (P) RMS Ref, 6-20
- RAB\$V_RAH option, (P) RMS Ref, 6-12, 6-17
- RAB\$V_REA option, (P) RMS Ref, 6-19
- RAB\$V_REV, (P) RMS Ref, 6-15
- RAB\$V_RLK option, (P) RMS Ref, 6-19
- RAB\$V_RNE option, (P) RMS Ref, 6-20
- RAB\$V_RNF option, (P) RMS Ref, 6-20
- RAB\$V_RRL option, (P) RMS Ref, 6-19
- RAB\$V_SYNCSTS option, (P) RMS Ref, 6-17
- RAB\$V_TMO option, (P) RMS Ref, 6-19, 6-20
 - for immediate mailbox service, (P) RMS Ref, 6-16
- RAB\$V_TPT option, (P) RMS Ref, 6-18
 - using with Put service, (P) RMS Ref, RMS-75
- RAB\$V_UIF option, (P) RMS Ref, 6-18
 - using with Put service, (P) RMS Ref, RMS-75

- RAB\$V_ULK option, (P) *RMS Ref*, 6-19
- RAB\$V_WAT option, (P) *RMS Ref*, 6-20
- RAB\$V_WBH option, (P) *RMS Ref*, 6-12, 6-17
- RAB\$W_ISI field, (P) *RMS Ref*, 6-3
- RAB\$W_RBF field, (P) *File Appl*, 8-3
- RAB\$W_RFA field, (P) *RMS Ref*, 6-9; (P) *File Appl*, 8-14, 8-17, 9-15
- RAB\$W_RSZ field, (P) *RMS Ref*, 3-4, 6-21, A-15; (P) *File Appl*, 8-3, 9-18
- RAB\$W_STV0 offset
 - alternate access to RAB\$L_STV, (P) *RMS Ref*, 6-21
- RAB\$W_STV2 field
 - for returning length of escape sequence, (P) *RMS Ref*, RMS-51
- RAB\$W_STV2 offset
 - alternate access to RAB\$L_STV, (P) *RMS Ref*, 6-21
- RAB\$W_USZ field, (P) *RMS Ref*, 6-22
- rab data type, (P) *Interfaces*, B-15
- \$RABDEF macro, (P) *File Appl*, 5-10
- RABs (record access blocks), (P) *Environment*, 10-16; (P) *Concepts*, 8-15; (P) *Interfaces*, B-15; (P) *File Appl*, 1-34; (P) *Alpha SDA*, SDA-75; (P) *VAX SDA*, SDA-81
 - arguments, (P) *RMS Ref*, 1-5
 - description, (P) *RMS Ref*, 1-5, 6-1
 - in C example, (P) *RMS Ref*, 3-4
 - summary of fields, (P) *RMS Ref*, 6-1
 - use in VAX MACRO example, (P) *RMS Ref*, A-15
- Race conditions
 - avoiding at AST-level, (P) *Modular Proc*, 3-17
 - elimination of, (P) *Modular Proc*, 3-17
 - how to avoid, (P) *DECthreads*, 3-8
- Radixes
 - conversion, (P) *Debugger*, 8-10, B-6
 - current, (P) *Debugger*, 8-10
 - default, (P) *Alpha SDA*, SDA-12; (P) *VAX SDA*, SDA-16
 - multilanguage program, (P) *Debugger*, 13-8
 - specifying, (P) *Debugger*, 8-10
- Radix operators, (P) *Alpha SDA*, SDA-12; (P) *VAX SDA*, SDA-16
 - used with linker options, (P) *Linker*, LINK-42
- Radix point symbol, returning the system's, (P) *LIB\$, LIB-347*
- RAH option, (P) *Rec Mgmt Util*, 4-12
- RAID (redundant arrays of independent disks), (G) *V6.2 New Feat*, 7-2; (G) *SW Overview*, 7-8; (S) *VMScluster Sys*, 6-22
 - volume shadowing support, (G) *V6.2 New Feat*, 3-6; (S) *Sys Mgr Essentials*, 10-40
- Rainbow
 - Digital personal computer in network, (S) *DECnet Intro*, 3-27
- RAISE exception, (P) *DECthreads*, 4-4
- RALLY, (G) *SW Overview*, 7-5, 7-17; (P) *Environment*, 1-4
 - programming technology, (S) *Dependable*, 3-9
 - prototyping tool, (S) *Dependable*, 8-32
- RAM disks, (S) *VAX Perform*, 3-39; (S) *Alpha Perform*, 18-4
- Random access
 - by key value, (P) *File Appl*, 2-6, 2-7, 8-6, 8-12 to 8-14
 - by relative record number, (P) *File Appl*, 2-6 to 2-7, 8-6, 8-7, 8-8
 - by RFA (record file address), (P) *File Appl*, 2-7, 8-6, 8-14
 - to indexed files, (P) *File Appl*, 2-6, 8-12 to 8-14
 - to relative files, (P) *File Appl*, 2-6, 8-8, 8-14
 - to sequential files, (P) *File Appl*, 2-6, 8-7, 8-14
 - with multibuffer count, (P) *File Appl*, 3-27
- Random number generator, (P) *MTH\$, MTH-119*
- random routine, (P) *Portable Math*, B-11
- Random routine, (P) *Portable Math*, DPML-48
- Range checking
 - disabling, (S) *Sys Mgmt Util M-Z*, 6-44
 - enabling, (S) *Sys Mgmt Util M-Z*, 6-45
- Ranges
 - colon (:), (P) *Debugger*, 8-17, 15-4, 15-6, 15-7
- RARP (Reverse Address Resolution Protocol), (S) *TCP/IP*, 2-7
- RB02 cartridge disk, (P) *I/O User*, 2-4
- RBMS (Remote Bridge Management System), (G) *SW Overview*, 7-7
 - monitoring LAN traffic, (S) *VMScluster Sys*, 10-26
- RC25 disk, (P) *I/O User*, 2-4
- RCF (remote console facility)
 - error messages, (S) *DECnet Mgmt*, 4-19
 - invoking, (S) *DECnet Mgmt*, 4-19
- RCK option, (P) *Rec Mgmt Util*, 4-23
- RCP, (S) *Sys Mgr Tuning*, 21-14; (S) *TCP/IP*, 3-3, 5-5
- rcp command, (S) *TCP/IP*, 3-4
- RCW (record control word), (P) *File Appl*, 1-30
- RD53 disk, (P) *I/O User*, 2-4
- RD54 disk, (P) *I/O User*, 2-4
- Rdb, (G) *SW Overview*, 7-6, 7-15 to 7-16; (P) *Environment*, 1-4
 - data integrity, (G) *SW Overview*, 2-13
- RdbAccess for ORACLE on OpenVMS, (P) *Environment*, 1-4
- RdbAccess for RMS, (P) *Environment*, 1-4
- RdbExpert, (G) *SW Overview*, 7-9
 - optimizing physical database design, (S) *Dependable*, 8-50
- RDO prototyping tool, (S) *Dependable*, 8-33

- RDT (response descriptor table), (P) *Alpha SDA*, SDA-144; (P) *VAX SDA*, SDA-166
- Read access, (P) *Rec Mgmt Util*, 4-23
- See also Access types, read continuation volumes, (S) *Sys Mgr Essentials*, 8-41
- devices, (S) *Security*, 5-4
- files, (S) *Security*, 5-8
- for disk directory files, (S) *Sys Mgr Essentials*, 9-11
- for disk files, (S) *Sys Mgr Essentials*, 9-6
- global sections, (S) *Security*, 5-14
- granting through ACLs, (S) *Security*, 4-20
- granting through protection codes, (S) *Security*, 4-25; (S) *Sys Mgr Essentials*, 11-8
- logical name tables, (S) *Security*, 5-16
- queues
- through ACLs, (S) *Security*, 5-17
 - through protection codes, (S) *Security*, 5-17
- resource domains, (S) *Security*, 5-19
- security class, (S) *Security*, 5-20
- volumes, (S) *Security*, 5-21
- READALL privilege, (S) *Security*, 4-11, 4-28, A-14
- Read and write operations
- ordering, (P) *Concepts*, 14-4
- Read attention AST function, (P) *I/O User*, 4-12
- Read check
- with APPEND command, (G) *DCL A-M*, DCLI-38
 - with COPY command, (G) *DCL A-M*, DCLI-83
 - with INITIALIZE command, (G) *DCL A-M*, DCLI-250
- READ command, (G) *DCL N-Z*, DCLII-30 to DCLII-33; (P) *Alpha SDA*, SDA-60; (P) *VAX SDA*, SDA-63
- compared to INQUIRE command, (G) *User*, 16-6
- for remote file, (S) *DECnet Intro*, 2-13
- in Mail, (G) *User*, 6-3
- in network operations, (S) *DECnet Intro*, 2-13
- /NEW qualifier in Mail, (G) *User*, 6-3, 6-15
- reading data into command procedures with, (G) *User*, 16-6
- SYS\$DISK, (P) *Alpha SDA*, SDA-60; (P) *VAX SDA*, SDA-64
- Read error
- if returned when booting, (S) *Sys Mgr Essentials*, 4-16
- READ/EXECUTIVE command, (P) *VAX SDA*, SDA-20
- Reading messages
- in Mail, (G) *User*, 6-22
- Read-modify-write operations
- atomic, (P) *Concepts*, 14-5
- \$READONLY\$ program section name definition, (P) *Linker*, B-16
- Read-only access, (S) *DECamds*, 1-9
- Read operation
- See Access types, read
- Read service, (P) *RMS Ref*, RMS-80 to RMS-82
- Read/write attributes
- ACP-QIO interface, (P) *I/O User*, 1-14
 - subfunction, (P) *I/O User*, 1-14
- Read/write disk
- partitions, (S) *Sys Mgr Tuning*, 23-2
- Ready access
- for directories on disk, (G) *DCL A-M*, DCLI-249
- READ_AHEAD attribute, (P) *Rec Mgmt Util*, 4-12
- READ_CHECK attribute, (P) *Rec Mgmt Util*, 4-23
- /READ_CHECK qualifier, (S) *Sys Mgmt Util A-L*, 3-9
- in Analyze/Disk_Structure utility, (S) *Sys Mgmt Util A-L*, 3-9
- READ_REGARDLESS attribute, (P) *Rec Mgmt Util*, 4-13; (P) *File Appl*, 7-12
- Real balance slots, (S) *VAX Perform*, 2-18
- Real-time priority, (S) *Sys Mgr Essentials*, 6-31
- Real-time processes, (S) *Alpha Perform*, 6-20
- Real-time processing, (G) *SW Overview*, 1-3
- Real types, (P) *Debugger*, 8-15
- REA option, (P) *Rec Mgmt Util*, 4-11
- Rebooting after configuration change, (S) *VMScluster Sys*, 8-33
- Rebooting a satellite with operating system installed on local disk, (S) *VMScluster Sys*, 8-41
- REBOOT phase of AUTOGEN, (S) *Sys Mgmt Util A-L*, 6-8
- Rebuilding system disks, (S) *VMScluster Sys*, 6-21
- Rebuilding volumes, (S) *Sys Mgr Essentials*, 7-4
- /REBUILD qualifier
- in Mount utility, (S) *Sys Mgmt Util M-Z*, 2-32
- Recall buffers, (G) *User*, 19-7; (S) *Security*, 3-15
- erasing, (G) *User*, 3-15
- RECALL command, (G) *User*, 3-14; (G) *DCL N-Z*, DCLII-34 to DCLII-36
- /ERASE qualifier, (G) *User*, 19-7
 - in LATCP, (S) *Sys Mgmt Util A-L*, 13-23
- Recalling commands, (G) *User*, 3-14
- using arrow keys, (G) *User*, 3-14
 - using RECALL command, (G) *User*, 3-15
- Receive buffers, (S) *DECnet Mgmt*, 3-14
- correcting insufficient number, (S) *DECnet Mgmt*, 3-42

Receive passwords, (S) *Security*, 12-16; (S) *DECnet Intro*, 3-26, 3-34; (S) *DECnet Mgmt*, 2-29
 in network operations, (S) *DECnet Intro*, 3-21

Receiving data
 Alpha, (P) *Calling Std*, 3-52

RECLAIMED_SPACE attribute, (P) *Rec Mgmt Util*, 4-4

Reclaiming buckets in a Prolog 3 indexed file, (P) *Rec Mgmt Util*, 3-1

RECNXINTERVAL system parameter, (S) *VMScluster Sys*, 3-20, A-3

Reconfiguration of software installation options, (S) *Sys Mgr Essentials*, 3-32

Reconfigurations
 of node, (S) *DECnet Intro*, 3-10, 3-11

Reconfiguring the cluster, (S) *VMScluster Sys*, 8-33

Reconnection to processes, (S) *Security*, 7-25

Record access, (P) *File Appl*, 9-6, 9-9
 in stream context, (P) *File Appl*, 8-15
 options, (P) *File Appl*, 7-3

Record access blocks
 See RABs

Record access modes, (P) *File Appl*, 2-2
 for indexed files, (P) *File Appl*, 8-9 to 8-14
 for relative files, (P) *File Appl*, 8-7, 8-9
 for sequential files, (P) *File Appl*, 8-7
 sequential, (P) *File Appl*, 8-6, 8-8, 8-12
 specifying, (P) *File Appl*, 8-6, 8-7, 9-9, 9-15, 9-16

Record attributes value, (P) *I/O User*, 1-19

Record blocking
 volume mount, (S) *Sys Mgmt Util M-Z*, 2-24

Record buffering
 See Buffering techniques

Record buffers, (P) *File Appl*, 9-17

Record control word
 See RCW

Record file addresses
 See RFAs

Record formats, (P) *RMS Ref*, 1-3; (P) *File Appl*, 1-1, 1-2, 2-8, 3-16
 fixed-length, (P) *Rec Mgmt Util*, 2-13; (P) *File Appl*, 1-29, 2-9, 2-10, 3-13, 3-16, 3-22
 options, (P) *File Appl*, 4-34
 selecting, (P) *File Appl*, 2-1
 stream, (P) *File Appl*, 2-13, 3-13
 undefined, (P) *File Appl*, 3-13, 3-14
 variable-length, (P) *File Appl*, 1-29, 2-9, 2-10, 3-13, 3-16, 3-22

Record header buffer, (P) *File Appl*, 9-15, 9-17, 9-18

Record I/O
 how to execute, (P) *RMS Ref*, A-34

Recording
 event messages, (S) *DECamds*, B-4
 lock contention information, (S) *DECamds*, B-4

Recording file description
 in Monitor utility, (S) *Sys Mgmt Util M-Z*, A-1

Recording files
 class types, (S) *Sys Mgmt Util M-Z*, A-8
 in Monitor utility
 class header, (S) *Sys Mgmt Util M-Z*, A-9
 class prefix for component classes, (S) *Sys Mgmt Util M-Z*, A-10
 data block, (S) *Sys Mgmt Util M-Z*, A-11
 Digital control records, (S) *Sys Mgmt Util M-Z*, A-3
 file header record, (S) *Sys Mgmt Util M-Z*, A-3
 I/O class record, (S) *Sys Mgmt Util M-Z*, A-20
 node transition record, (S) *Sys Mgmt Util M-Z*, A-7
 RMS class record, (S) *Sys Mgmt Util M-Z*, A-30
 RMS file record, (S) *Sys Mgmt Util M-Z*, A-7
 SCS class record, (S) *Sys Mgmt Util M-Z*, A-36
 system information record, (S) *Sys Mgmt Util M-Z*, A-5

Record layout
 Alpha, (P) *Calling Std*, 3-56
 VAX compatible, (P) *Calling Std*, 3-58

Record length field, (P) *File Appl*, 1-31

Record lock blocks
 See RLBs

Record locking record-processing options, (P) *RMS Ref*, 6-18

Record management, (P) *Environment*, 10-2

Record Management Services
 See RMS

Record operation, (P) *File Appl*, 8-1 to 8-5

Record oriented devices
 used as output to file specifications, (G) *User*, 12-9

Record processing
 list of services, (P) *File Appl*, 8-5
 RMS services listed, (P) *RMS Ref*, 1-1
 services listed, (P) *RMS Ref*, 1-1
 using record management services, (P) *RMS Ref*, A-3

Record processing macros
 format example, (P) *RMS Ref*, A-10

Record-processing option
 for Connect service, (P) *RMS Ref*, 6-12

Record processing run-time option, (P) *File Appl*, 9-13, 9-16 to 9-18

/RECORD qualifier
in Backup utility, (S) *Sys Mgmt Util A-L*, 7-52

Record reference vector
See RRV

Records, (P) *Rec Mgmt Util*, 1-3

See also Data records

adding, (P) *File Appl*, 9-10

alternate, (P) *Rec Mgmt Util*, 1-6

analyzing
debugger information, (G) *DCL A-M*, DCLI-26

global symbol directory, (G) *DCL A-M*, DCLI-27

link option specification, (G) *DCL A-M*, DCLI-27

module header, (G) *DCL A-M*, DCLI-27

module traceback, (G) *DCL A-M*, DCLI-27

patch text, (G) *DCL A-M*, DCLI-23

relocation, (G) *DCL A-M*, DCLI-28

analyzing end-of-file, (G) *DCL A-M*, DCLI-26

blocking, (P) *File Appl*, 1-16

blocking on tapes, (S) *Sys Mgr Essentials*, 8-6

comparing, (G) *DCL A-M*, DCLI-151

compressing, (P) *Util Routines*, DCX-1

contents, (P) *File Appl*, 2-1

deleting, (P) *File Appl*, 8-4, 9-18

duplicating, (S) *Sys Mgmt Util A-L*, 5-24

entering records from a terminal, (G) *User*, 11-12

examining remote, (S) *DECnet Intro*, 2-8

expanding, (P) *Util Routines*, DCX-8

I/O, (P) *Concepts*, 8-12

inserting, (P) *File Appl*, 8-3 to 8-4, 9-16 to 9-17

RMS program example, (P) *RMS Ref*, A-27

locating, (P) *File Appl*, 8-2 to 8-3

locking, (P) *File Appl*, 9-6

deadlock, (P) *File Appl*, 7-15

use with update operation, (P) *File Appl*, 8-3

maximum length, (P) *Rec Mgmt Util*, 2-17, 4-34

maximum number in a relative file, (P) *Rec Mgmt Util*, 4-19

maximum size, (P) *Rec Mgmt Util*, 4-34

modifying in occupied cells, (P) *File Appl*, 2-4

padding, (P) *Rec Mgmt Util*, 2-4, 2-13

positioning to, (P) *Rec Mgmt Util*, 1-21

program example show file insertion, (P) *RMS Ref*, A-27

reading, (G) *DCL N-Z*, DCLII-30

reading and writing requirements, (P) *RMS Ref*, A-23

retrieving, (P) *File Appl*, 8-2 to 8-3, 9-13 to 9-16

Records

retrieving (cont'd)

RMS program example, (P) *RMS Ref*, A-27

retrieving sequentially from an indexed file, (P) *File Appl*, 2-5

size, (S) *Sys Mgr Essentials*, 8-26

sorting, (G) *User*, 11-2

fields, (G) *User*, 11-2, 11-3

storing sequentially in a relative file, (P) *File Appl*, 2-4

truncation, (P) *Rec Mgmt Util*, 2-4

updating, (P) *File Appl*, 8-4, 9-17, 9-18

writing to a file, (G) *DCL N-Z*, DCLII-428

Records CONTROL_FIELD_SIZE attribute, (P) *Rec Mgmt Util*, 4-34

Record size
See Tapes

/RECORDSIZE qualifier
in Mount utility, (S) *Sys Mgmt Util M-Z*, 2-33

Record sorting, (G) *User*, 11-1

See also Sort/Merge utility

Record stream connection option
See File opening options

Record streams
connecting to a file, (P) *File Appl*, 7-2

definition, (P) *File Appl*, 7-2

in the context of a RAB, (P) *RMS Ref*, 6-1

multiple, with block I/O, (P) *RMS Ref*, A-35

Record structures, (P) *Rec Mgmt Util*, 1-3

alternate, (P) *File Appl*, 10-21

Record transfer mode
locate, (P) *File Appl*, 7-15

move, (P) *File Appl*, 7-15

Record types, (P) *Debugger*, 3-17, 3-18, 8-17

in Monitor utility, (S) *Sys Mgmt Util M-Z*, A-2

/RECORD_ATTRIBUTES qualifier
in Analyze/Disk_Structure utility, (S) *Sys Mgmt Util A-L*, 3-10

RECORD_IO attribute, (P) *Rec Mgmt Util*, 4-3; (P) *File Appl*, 7-3

Recoverability, (G) *SW Overview*, 2-12

Recoveries
from device failures, (S) *Dependable*, 8-21

repair actions, (S) *Dependable*, 8-21t

Recovery procedures
after system message occurs, (G) *Help Msg*, 1-4

Recovery unit blocks
See RUBs

Recovery unit file blocks
See RUFBS

Recovery unit stream blocks
See USBs

Recovery unit system services
global symbols, (P) *Alpha SDA*, SDA-61; (P) *VAX SDA*, SDA-65

- RECOVERY_UNIT_SERVICES.EXE file
 - global symbols, (P) *VAX SDA*, SDA-65
- RECOVERY_UNIT_SERVICES.STB file
 - global symbols, (P) *Alpha SDA*, SDA-61
- Redirecting output, (G) *User*, 12-9
- Reducing I/O on system disk, (S) *Sys Mgr Tuning*, 16-8
- Redundancy
 - circuit level, (S) *Dependable*, 4-4
 - functional units, (S) *Dependable*, 1-13 to 1-14
 - OpenVMS support, (S) *Dependable*, 8-10
 - network level, (S) *Dependable*, 4-11
 - subsystem level, (S) *Dependable*, 4-4
 - system kernel level, (S) *Dependable*, 4-5
- Redundant arrays of independent disks
 - See RAID
- Reentrancy
 - AST, (P) *Modular Proc*, 3-15
 - full, (P) *Modular Proc*, 3-15
- Reentrant
 - AST, (P) *SMG\$*, 4-1
- Reentrant code
 - compilers that generate, (P) *DECthreads*, 3-4
 - necessary for multithreaded program, (P) *DECthreads*, 1-5
 - nonreentrant routines (avoiding), (P) *DECthreads*, 1-7
- Reference
 - definition, (P) *Calling Std*, 1-5
- Reference argument item
 - for Alpha, (P) *Calling Std*, 3-48
- Reference monitors, (S) *Security*, 2-1
 - applying to networks, (S) *Security*, 12-2
 - implementation, (S) *Security*, 2-3
- Reference sites and support groups, (S) *Dependable*, 3-11
- REFRESH command
 - in LATCP, (S) *Sys Mgmt Util A-L*, 13-24
 - in Show Cluster utility, (S) *Sys Mgmt Util M-Z*, 4-40
- Register 0
 - See R0 register
- Register frame procedures, (P) *Calling Std*, 3-14
 - descriptors, (P) *Calling Std*, 3-15
- Registers
 - See also PCs (program counters) and Vector registers
 - Alpha usage, (P) *Interfaces*, 2-2; (P) *Calling Std*, 3-1
 - built-in symbols, (P) *Debugger*, 8-22, B-4
 - data, (P) *Interfaces*, 1-5
 - depositing into, (P) *Debugger*, 3-24, 8-22
 - display, (P) *Debugger*, 3-24, 11-10
 - for routine on call stack, (P) *Debugger*, 3-22, 11-11
 - displaying, (P) *Alpha SDA*, SDA-86, SDA-128; (P) *VAX SDA*, SDA-95, SDA-150
- Registers (cont'd)
 - display kind, (P) *Debugger*, 11-18
 - examining, (P) *Debugger*, 3-24, 8-22
 - floating point usage, (P) *Calling Std*, 3-2
 - for returns, (P) *Interfaces*, 1-4, 1-12; (P) *Calling Std*, 2-1
 - general, (P) *VAX SDA*, SDA-18
 - integer, (P) *Alpha SDA*, SDA-15
 - integer usage, (P) *Calling Std*, 3-1
 - PSL, (P) *Debugger*, 8-24
 - saving when making call, (P) *RMS Ref*, 2-4
 - scalar, (P) *Calling Std*, 2-1
 - SET SCOPE/CURRENT command, (P) *Debugger*, 11-11
 - symbolizing, (P) *Debugger*, 8-13
 - symbols, (P) *Debugger*, 8-22, B-4
 - variable, (P) *Debugger*, 3-21, 7-14, 8-1
 - VAX usage, (P) *Interfaces*, 2-1; (P) *Calling Std*, 2-1
 - view, (P) *Debugger*, 3-24
 - watchpoint, (P) *Debugger*, 7-14
- Register save area
 - See RSA
- /REGISTERS qualifier, (P) *Alpha SDA*, SDA-128; (P) *VAX SDA*, SDA-150
- Register View, (P) *Debugger*, 3-24
- Regression testing, (P) *Modular Proc*, 6-1
- Reinitializing volumes, (G) *User*, 12-11; (S) *Sys Mgr Essentials*, 8-45
- Related-file-position option, (P) *File Appl*, 4-35
- RELATIVE attribute, (P) *Rec Mgmt Util*, 4-21
- Relative file field
 - record access, (P) *RMS Ref*, 6-2
- Relative files, (P) *File Appl*, 2-17
 - advantages of using, (P) *File Appl*, 2-18
 - allocating, (P) *File Appl*, A-1
 - bucket sizes, (P) *File Appl*, 3-10, 3-16, 7-18, A-1
 - buffering, (P) *File Appl*, 7-18
 - buffer requirement, (P) *RMS Ref*, 6-7
 - deferred-write option with, (P) *File Appl*, 3-11
 - defining cell size, (P) *RMS Ref*, 4-21
 - description of relative record number, (P) *RMS Ref*, 6-5
 - designing, (P) *File Appl*, 3-15 to 3-18
 - determining record length, (P) *RMS Ref*, 4-22
 - disadvantages of using, (P) *File Appl*, 2-18
 - establishing highest record number, (P) *RMS Ref*, 4-21
 - examining, (P) *File Appl*, 10-14, 10-15
 - limit on number of records, (P) *Rec Mgmt Util*, 4-19
 - maximum record size, (P) *File Appl*, 3-16
 - nonexistent record processing, (P) *RMS Ref*, 6-19
 - omitting initial prezeroing, (P) *RMS Ref*, A-34
 - optimizing performance, (P) *File Appl*, 3-15 to 3-18

Relative files (cont'd)

- organization, (P) *File Appl*, 1-2
- random access, (P) *RMS Ref*, 6-3
- record access, (P) *File Appl*, 8-7 to 8-9, 8-14
- record size limit, (P) *RMS Ref*, 4-22
- RFA value, (P) *RMS Ref*, 6-10
- specifying bucket size, (P) *RMS Ref*, 7-4
- specifying cell size, (P) *RMS Ref*, 9-4
- structure, (P) *Rec Mgmt Util*, 1-1, 1-2
- tuning, (P) *File Appl*, 3-15 to 3-18
- viewing individual data buckets, (P) *Rec Mgmt Util*, 1-2
- with global buffers, (P) *File Appl*, 3-18
- /RELATIVE qualifier, (P) *File Appl*, 7-18
- Relative record number, (P) *File Appl*, 1-2, 3-15
- Release Notes, (S) *DECams*, 5-2, A-1
 - extracting from software products, (S) *Sys Mgr Essentials*, 3-29
 - on software products, (S) *Sys Mgr Essentials*, 3-29; (S) *Sys Mgmt Util M-Z*, 3-9
 - VMSINSTAL.COM option, (S) *Sys Mgr Essentials*, 3-17
- /RELEASE qualifier, (P) *VAX SDA*, SDA-6
- Release service, (P) *RMS Ref*, RMS-83; (P) *File Appl*, 8-5
 - condition values, (P) *RMS Ref*, RMS-84
 - control block input and output fields, (P) *RMS Ref*, RMS-84
- /RELEASE_TAPE qualifier
 - in Backup utility, (S) *Sys Mgmt Util A-L*, 7-52
- Releasing a job, (S) *Sys Mgr Essentials*, 13-71
- Reliability, (G) *SW Overview*, 2-12
 - OSI, (S) *TCP/IP*, 2-2
 - TCP/IP, (S) *TCP/IP*, 2-2
- Reliable Transaction Router
 - See RTR
- RELOAD command
 - in SYSGEN, (S) *Sys Mgmt Util M-Z*, 5-15
- /RELOCATE qualifier, (P) *Alpha SDA*, SDA-60; (P) *VAX SDA*, SDA-63
- Relocating symbols
 - definition, (P) *Linker*, 1-2
- Relocation records
 - analyzing in object files, (G) *DCL A-M*, DCLI-28
- remainder routine, (P) *Portable Math*, DPML-49, B-11
- REMINDER.COM command procedure, (G) *User*, C-5
 - sample execution, (G) *User*, C-8
- Remote (hot standby) sites, (S) *Dependable*, 5-11
 - multiple-site data center VMScluster systems, (S) *Dependable*, 7-12
- Remote batch execution, (S) *DECnet Intro*, 2-12, 2-13
- Remote Bridge Management System
 - See RBMS
- Remote command execution, (S) *DECnet Mgmt*, 3-6
- Remote console connections, (S) *DECnet Mgmt*, 4-18
- Remote console facility
 - See RCF
- Remote directory listings, (S) *Sys Mgr Tuning*, 21-14
- Remote file access, (S) *Sys Mgr Tuning*, 21-14; (S) *DECnet Intro*, 2-2; (S) *DECnet Mgmt*, 1-17, 8-1
 - See also File specifications
 - controls, (S) *DECnet Intro*, 2-3
 - through command procedures, (S) *DECnet Intro*, 2-12
 - through high-level language programs, (S) *DECnet Intro*, 2-12
- Remote file operations
 - error messages, (S) *DECnet Intro*, 2-9
 - in a multivendor network, (S) *DECnet Mgmt*, 9-1
 - OpenVMS to MS-DOS, (S) *DECnet Mgmt*, 9-20
 - OpenVMS to RT-11, (S) *DECnet Mgmt*, 9-11
 - OpenVMS to TOPS-10, (S) *DECnet Mgmt*, 9-14
 - OpenVMS to TOPS-20, (S) *DECnet Mgmt*, 9-17
 - OpenVMS to IAS, (S) *DECnet Mgmt*, 9-2
 - OpenVMS to MVS, (S) *DECnet Mgmt*, 9-26
 - OpenVMS to RSTS/E, (S) *DECnet Mgmt*, 9-5
 - OpenVMS to RSX (using FCS-based FAL), (S) *DECnet Mgmt*, 9-9
 - OpenVMS to RSX (using RMS-based FAL), (S) *DECnet Mgmt*, 9-7
 - OpenVMS to ULTRIX, (S) *DECnet Mgmt*, 9-23
 - OpenVMS to VMS
 - Version 5.4 to pre-V5.0 version, (S) *DECnet Mgmt*, 9-28
 - restrictions on, (S) *DECnet Mgmt*, 9-1
- Remote files
 - backing up, (S) *DECnet Intro*, 2-9
 - comparing, (S) *DECnet Intro*, 2-7
 - copying, (S) *DECnet Intro*, 2-5
 - creating with editor, (S) *DECnet Intro*, 2-7
 - deleting, (S) *DECnet Intro*, 2-7
 - displaying contents, (S) *DECnet Intro*, 2-9
 - editing, (S) *DECnet Intro*, 2-7
 - examining, (S) *DECnet Intro*, 2-8
 - lexical functions, (S) *DECnet Intro*, 2-12, 2-13
 - merging, (S) *DECnet Intro*, 2-7
 - printing, (S) *DECnet Intro*, 2-6
 - purging, (S) *DECnet Intro*, 2-7
 - restoring to local node, (S) *DECnet Intro*, 2-9
 - searching, (S) *DECnet Intro*, 2-7
 - sorting, (S) *DECnet Intro*, 2-7

- Remote files (cont'd)
 - specifications and logical names, (S) *DECnet Intro*, 2-4
 - specifying, (S) *DECnet Intro*, 2-2, 2-3
- Remote identifiers, (S) *Security*, 4-3; (S) *Sys Mgr Essentials*, 11-11
- Remote InfoServer device
 - BIND command, (S) *Sys Mgr Tuning*, 23-14
 - making available, (S) *Sys Mgr Tuning*, 23-14
 - mounting during system startup, (S) *Sys Mgr Tuning*, 23-14
- Remote login, (S) *Sys Mgr Tuning*, 21-13
- Remote monitoring
 - limitation, (S) *Sys Mgr Tuning*, 18-43
 - mixed-version VMScluster systems, (G) *Compatibility*, 2-9; (S) *Sys Mgr Tuning*, 18-43
- Remote network command terminal facility, (S) *DECnet Intro*, 3-3
- Remote node database
 - logical name defining location, (S) *Sys Mgr Essentials*, 5-8
- Remote nodes, (S) *DECnet Intro*, 3-1; (S) *DECnet Mgmt*, 1-12, 1-17, 2-1, 3-5; (S) *DECnet Mgmt Util*, 4-8
 - See also Networks and Node names
 - access control strings, (G) *User*, 4-7
 - accessing interactively, (S) *DECnet Intro*, 3-3
 - address, (S) *DECnet Intro*, 3-8
 - copying database, (S) *DECnet Intro*, 3-18; (S) *DECnet Mgmt*, 2-5, 3-17
 - definition, (S) *Sys Mgr Essentials*, 2-13
 - displaying counter information with NCP, (S) *DECnet Intro*, 4-1
 - loopback test, (S) *DECnet Mgmt*, 7-2
 - losing connection, (S) *DECnet Intro*, 3-3
 - monitoring, (G) *Compatibility*, 2-9
 - monitoring in a VMScluster system, (G) *Compatibility*, 2-9
 - name, (S) *DECnet Intro*, 3-8
 - obtaining information about using F\$CONTEXT, (G) *User*, 17-8, 17-9
 - setting name and address, (S) *DECnet Mgmt*, 3-8
 - terminating connection, (S) *DECnet Intro*, 3-3
- Remote printing, (S) *Sys Mgr Essentials*, 13-13
- Remote Procedure Call
 - See DECRpc
- Remote queue status, (S) *Sys Mgr Essentials*, 13-51
- Remote sessions
 - aborting, (G) *User*, 2-24
- Remote system manager
 - See RSM
- Remote tasks, (S) *DECnet Intro*, 2-12, 2-14
 - specification, (S) *DECnet Intro*, 2-14
- Remote terminals, (S) *Sys Mgr Essentials*, 7-11
- Remote terminal service, (S) *Sys Mgr Tuning*, 21-13
- REMOVE (Field) command
 - in Show Cluster utility, (S) *Sys Mgmt Util M-Z*, 4-44
- REMOVE CIRCUITS command
 - in Show Cluster utility, (S) *Sys Mgmt Util M-Z*, 4-40
- REMOVE CLUSTER command
 - in Show Cluster utility, (S) *Sys Mgmt Util M-Z*, 4-41
- REMOVE command
 - in Install utility, (S) *Sys Mgmt Util A-L*, 11-18
- REMOVE CONNECTIONS command
 - in Show Cluster utility, (S) *Sys Mgmt Util M-Z*, 4-42
- REMOVE COUNTERS command
 - in Show Cluster utility, (S) *Sys Mgmt Util M-Z*, 4-43
- REMOVE CREDITS command
 - in Show Cluster utility, (S) *Sys Mgmt Util M-Z*, 4-43
- REMOVE ERRORS command
 - in Show Cluster utility, (S) *Sys Mgmt Util M-Z*, 4-44
- REMOVE LOCAL_PORTS command
 - in Show Cluster utility, (S) *Sys Mgmt Util M-Z*, 4-45
- REMOVE MEMBERS command
 - in Show Cluster utility, (S) *Sys Mgmt Util M-Z*, 4-46
- Remove service, (P) *RMS Ref*, RMS-85 to RMS-87
- REMOVE SYSTEMS command
 - in Show Cluster utility, (S) *Sys Mgmt Util M-Z*, 4-46
- Removing a computer, (S) *VMScluster Sys*, 8-19, 8-33
 - adjusting EXPECTED_VOTES, (S) *VMScluster Sys*, 8-36
 - shutting down before removing from cluster, (S) *VMScluster Sys*, 8-18
- Removing a satellite, (S) *VMScluster Sys*, 8-18
- Removing installed software, (S) *Sys Mgmt Util M-Z*, 3-19
- Removing installed software products, (S) *Sys Mgr Essentials*, 3-34
- RENAME command, (G) *User*, 4-13; (G) *DCL N-Z*, DCLII-37 to DCLII-40
 - /INHERIT_SECURITY qualifier, (S) *Security*, 5-11
- Rename service, (P) *RMS Ref*, RMS-89; (P) *File Appl*, 5-9
 - alternative to specifying arguments to \$RENAME macro, (P) *RMS Ref*, RMS-90
 - condition values, (P) *RMS Ref*, RMS-92

Rename service (cont'd)

- control block input fields, (P) *RMS Ref*, RMS-90
- control block output fields, (P) *RMS Ref*, RMS-91
- exception in argument list, (P) *RMS Ref*, 2-5
- indicating successful completion, (P) *RMS Ref*, A-27
- noting format difference, (P) *RMS Ref*, A-10
- program example, (P) *RMS Ref*, A-25
- requirements for using, (P) *RMS Ref*, RMS-90
- Reorganizing a file, (P) *Rec Mgmt Util*, 3-1
- REPAIR command
 - in LMCP, (S) *Sys Mgmt Util A-L*, 14-13
- Repairing errors, (S) *Sys Mgmt Util A-L*, 3-3, 3-7, 3-10, 3-11
- /REPAIR qualifier
 - in Analyze/Disk_Structure utility, (S) *Sys Mgmt Util A-L*, 3-11
- REPEAT command, (P) *Debugger*, 12-10; (P) *Alpha SDA*, SDA-64; (P) *VAX SDA*, SDA-68
- Repeating characters, (P) *Rec Mgmt Util*, 4-26, 4-27
 - in compression, (P) *File Appl*, 3-19
- REPLACE command
 - in Install utility, (S) *Sys Mgmt Util A-L*, 11-18
- /REPLACE qualifier, (P) *Linker*, LINK-25
 - effect on debugging, (P) *Linker*, 1-16
 - in Backup utility, (S) *Sys Mgmt Util A-L*, 7-53
- LIBRARY command, (P) *Concepts*, 17-2
- REPLY command, (G) *DCL N-Z*, DCLII-41 to DCLII-48
 - See also INITIALIZE command
 - See also MOUNT command
 - See also REQUEST command
 - canceling a user request, (S) *Sys Mgr Essentials*, 8-27; (S) *Sys Mgr Tuning*, 18-19
 - closing current operator log file, (S) *Sys Mgr Tuning*, 18-17
 - disabling operator status, (G) *DCL N-Z*, DCLII-43
 - disabling operator terminals, (S) *Sys Mgr Essentials*, 2-24; (S) *Sys Mgr Tuning*, 18-18
 - enabling operator status, (G) *DCL N-Z*, DCLII-43
 - enabling operator terminals, (S) *Sys Mgr Essentials*, 2-23; (S) *Sys Mgr Tuning*, 18-17
 - specifying terminal, (S) *Sys Mgr Tuning*, 18-18
 - ensuring that correct volume is mounted, (S) *Sys Mgr Essentials*, 8-41
 - initializing tape, (S) *Sys Mgr Essentials*, 8-41
 - in Mail, (G) *User*, 6-11
 - linking continuation volume to volume set, (S) *Sys Mgr Essentials*, 8-41

REPLY command (cont'd)

- opening a new operator log file, (S) *Sys Mgr Tuning*, 18-17, 18-22
- putting request in wait state, (S) *Sys Mgr Essentials*, 8-27
- replying to requests, (S) *Sys Mgr Essentials*, 2-25, 8-27
- responding to file system requests, (G) *DCL N-Z*, DCLII-42
- responding to user requests, (G) *DCL N-Z*, DCLII-42
- response not recorded in operator log file, (S) *Sys Mgr Tuning*, 18-19
- sending messages to users, (S) *Sys Mgr Essentials*, 2-22
- REPLY/ENABLE=NETWORK command
 - in network operations, (S) *DECnet Intro*, 4-4
 - to enable network operator terminal, (S) *DECnet Intro*, 4-4
- REPLY/ENABLE=SECURITY command
 - enabling security operator terminals, (S) *Sys Mgr Tuning*, 18-29
- Report formats from Audit Analysis utility
 - brief, (S) *Sys Mgmt Util A-L*, 4-7
 - full, (S) *Sys Mgmt Util A-L*, 4-9
 - summary, (S) *Sys Mgmt Util A-L*, 4-23
- Reporting errors, (S) *Sys Mgmt Util A-L*, 3-3; (P) *DECthreads*, 3-9
 - API, (P) *DECthreads*, 3-9
 - disk structure, (S) *Sys Mgr Essentials*, 8-56
 - internal, (P) *DECthreads*, 3-9
- Reporting on product dependencies, (S) *Sys Mgr Essentials*, 3-27
- Reporting problems, (S) *DECamds*, A-15
- Reports
 - AUTOGEN, (S) *Sys Mgr Tuning*, 14-22
 - SHOW CLUSTER, (S) *Sys Mgmt Util M-Z*, 4-3
 - adding classes of data, (S) *Sys Mgr Tuning*, 20-4
 - adding data, (S) *Sys Mgr Tuning*, 20-8
 - adding fields of data, (S) *Sys Mgr Tuning*, 20-4
 - changing default at startup, (S) *Sys Mgr Tuning*, 20-14
 - command to modify, (S) *Sys Mgr Tuning*, 20-10; (S) *Sys Mgmt Util M-Z*, B-3
 - compressing reports, (S) *Sys Mgr Tuning*, 20-11
 - controlling displays, (S) *Sys Mgr Tuning*, 20-5, 20-10
 - controlling the display, (S) *Sys Mgmt Util M-Z*, 4-4
 - controlling with command procedures, (S) *Sys Mgr Tuning*, 20-5, 20-16
 - default display, (S) *Sys Mgmt Util M-Z*, 4-37
 - formatting, (S) *Sys Mgmt Util M-Z*, 4-52
 - moving display, (S) *Sys Mgr Tuning*, 20-12

Reports

SHOW CLUSTER (cont'd)

- organization of, (S) *Sys Mgr Tuning*, 20-4;
(S) *Sys Mgmt Util M-Z*, 4-3
- panning, (S) *Sys Mgr Tuning*, 20-6
- printing, (S) *Sys Mgmt Util M-Z*, 4-55
- scrolling, (S) *Sys Mgr Tuning*, 20-14
- time period for, (S) *Sys Mgmt Util M-Z*,
4-6, 4-7
- update interval, (S) *Sys Mgmt Util M-Z*,
4-8, 4-54

Report system event

- global symbols, (P) *Alpha SDA*, SDA-61; (P)
VAX SDA, SDA-65

REQSYSDEF.STB file, (P) *Alpha SDA*, SDA-15

REQUEST command, (G) *DCL N-Z*, DCLII-49 to
DCLII-50

recording request in operator log file, (S) *Sys
Mgr Tuning*, 18-19

sending requests to an operator, (S) *Sys Mgr
Essentials*, 2-25; (S) *Sys Mgr Tuning*,
18-19

Request descriptor table entries, (S) *VMScluster
Sys*, 9-19

Request identification number

in operator log file, (S) *Sys Mgr Tuning*, 18-19

Request to unwind, (P) *Calling Std*, 6-19

Requeue, (P) *DECthreads*, 2-18

Requeuing

executing job, (S) *Sys Mgr Essentials*, 13-73

pending job, (S) *Sys Mgr Essentials*, 13-73

Requirements

business, (S) *Dependable*, 2-5

user, (S) *Dependable*, 2-4

Requirements and limitations

in ANALYZE/DISK_STRUCTURE, (S) *Sys
Mgmt Util A-L*, 3-6

RERAISE exception, (P) *DECthreads*, 4-5, 4-8,
4-10

RERUN command, (P) *Debugger*, 5-9, 5-12, 5-13,
7-11, 7-13

Reserved data type code, (P) *Calling Std*, 4-6

Reserved descriptor class code, (P) *Calling Std*,
5-23

Reserved event flag

use of, (P) *RMS Ref*, 2-8

Reserved files, (S) *Sys Mgr Tuning*, A-4

list of, (S) *Sys Mgr Essentials*, 8-4

Reserved UIC group numbers, (S) *Security*, 4-2

Reserve region, (P) *Calling Std*, 3-59

Reset button on POLYCENTER Software

Installation utility, (S) *Sys Mgr Essentials*,
3-40

Reset modules, (S) *Sys Mgr Essentials*, 13-44

See also Device control modules

Resetting saved information, (S) *Sys Mgr
Essentials*, 3-40

Resident executive, (S) *Alpha Perform*, 5-2

Resident images, (P) *Alpha SDA*, SDA-127,
SDA-138

creating, (P) *Linker*, 1-16, LINK-26

effect on data image sections, (P) *Linker*,
LINK-26

effect on image map file, (P) *Linker*, 5-5

installing (Alpha), (S) *Sys Mgr Tuning*, 16-11,
16-12, 16-13

in system startup, (S) *Sys Mgr Essentials*,
5-13

link-time considerations, (P) *Linker*, 1-16

/RESIDENT qualifier

installing an image, (P) *Alpha SDA*, SDA-58

Resource

shared, (S) *Sys Mgr Tuning*, 20-1

Resource access, (S) *VMScluster Sys*, 1-4, 2-15

Resource attribute, (P) *Concepts*, 23-5

Resource attributes, (S) *Security*, 8-10, 8-21;

(S) *Sys Mgmt Util A-L*, 5-21, 5-29, 5-37; (P)
Concepts, 23-5

Resource blocks

See RSBs

Resource consumption, (S) *Alpha Perform*, 8-3

Resource contention considerations, (S)
Dependable, 8-14

Resource domains, (S) *Security*, 4-10

events audited, (S) *Security*, 5-19

privilege requirements, (S) *Security*, 5-19

profile storage, (S) *Security*, 5-19

security elements of, (S) *Security*, 5-18

template profile, (S) *Security*, 5-19

types of access, (S) *Security*, 5-19

Resource file, debugger

customizing, (P) *Debugger*, 3-31

Resource granularity

in lock, (P) *Concepts*, 15-3

Resource identifiers, (S) *Security*, 8-21

as file owners, (S) *Security*, 5-10, 5-11

Resource limitations

compensating for, (S) *Alpha Perform*, 16-1

diagnosing, (S) *Alpha Perform*, 12-1

Resource limits

See Process quotas

Resource locking, (S) *VMScluster Sys*, 1-4, 2-15

Resource monitoring, (S) *Security*, 9-29

disabling, (S) *Security*, 9-29

Resources, (P) *Modular Proc*, 2-11

accounting, (S) *Sys Mgr Tuning*, 19-1

accounting, programming information, (S) *Sys
Mgmt Util A-L*, C-1

compensating for limitations, (S) *VAX Perform*,
5-1

diagnosing limitations, (S) *VAX Perform*, 4-1

Resources (cont'd)

- displaying SDA information, (P) *Alpha SDA*, SDA-139; (P) *VAX SDA*, SDA-160
- evaluating, (S) *VAX Perform*, 3-8
- evaluation strategy, (S) *VAX Perform*, 3-1
- improving, (S) *VAX Perform*, 3-9
- lock management concept, (P) *Concepts*, 15-2
- managing, (S) *VAX Perform*, 2-1, 3-1, 3-2
- name, (P) *Concepts*, 15-4
- producing usage reports of, (S) *Sys Mgr Tuning*, 19-4; (S) *Sys Mgmt Util A-L*, 2-25
- tracking use, (S) *Sys Mgr Tuning*, 19-1

Resource sharing

- coordination between VMScluster nodes, (S) *VMScluster Sys*, 2-5

Resource wait mode

- setting, (P) *Sys Svc II*, SYS2-267
- system service, (P) *Interfaces*, 4-6

Response descriptor table

- See RDT

Response time

- external factors, (S) *DECamsds*, 5-14
- optimizing by customizing data collection, (S) *DECamsds*, 5-14
- system hardware, (S) *DECamsds*, 5-17

Restarting

- deactivated autostart queues, (G) *DCL N-Z*, DCLII-394, DCLII-398
- DECnet, (S) *DECnet Intro*, 3-32, 3-34
- queues, (G) *DCL N-Z*, DCLII-366
- See also Starting queues
- stopped queues, (G) *DCL N-Z*, DCLII-394, DCLII-398
- the queue manager, (G) *DCL N-Z*, DCLII-379, DCLII-393

Restarting the queue manager, (S) *Sys Mgr Essentials*, 12-9

\$RESTART symbol

- using in command procedures, (G) *User*, 15-25

REST command, (P) *File Appl*, 10-11, 10-12, 10-15

Restore operations, (G) *Compatibility*, 1-5

- with BACKUP, (S) *Sys Mgr Essentials*, 10-28

Restoring quorum, (S) *VMScluster Sys*, 10-21

Restoring satellite configuration data, (S) *VMScluster Sys*, 10-5

Restoring the queue database, (S) *Sys Mgr Essentials*, 12-12

Restricted accounts, (S) *Security*, 3-4, 7-10; (S) *Sys Mgr Essentials*, 6-13, 6-29

- danger of process spawning, (S) *Security*, 7-8
- setting up, (S) *Security*, 7-4
- when to use, (S) *Security*, 7-4

Restrictions

- See also Security restrictions
- in using SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-5
- Mount utility, (S) *Sys Mgmt Util M-Z*, 2-6

Restrictions (cont'd)

- to calling services, (P) *RMS Ref*, 2-8

RESTUSER.COM command procedure, (S) *Sys Mgr Essentials*, 10-36

Resultant string

- requesting, (P) *RMS Ref*, 5-2

Resume Process fix, (S) *DECamsds*, 4-5

Resuming printing of an output job, (S) *Sys Mgr Essentials*, 13-75, 13-76, 13-77

Resuming queue status, (S) *Sys Mgr Essentials*, 13-51

Retained job status, (S) *Sys Mgr Essentials*, 13-74

- definition, (S) *Sys Mgr Essentials*, 13-69

- releasing jobs in, (S) *Sys Mgr Essentials*, 13-71

Retaining jobs in a queue

- changing retention of a job, (S) *Sys Mgr Essentials*, 13-74

Retransmissions

- analyzing errors, (S) *VMScluster Sys*, F-36
- caused by HELLO datagram congestion, (S) *VMScluster Sys*, G-2
- caused by lost ACKs, (S) *VMScluster Sys*, F-20
- caused by lost messages, (S) *VMScluster Sys*, F-19
- problems, (S) *VMScluster Sys*, F-18
- under congestion conditions, (S) *VMScluster Sys*, G-1

Retransmit limit, (S) *Sys Mgmt Util A-L*, 13-31

Retransmit timer, (S) *DECnet Mgmt*, 3-43

- formula for, (S) *DECnet Mgmt*, 3-44

Retrieval pointer, (P) *File Appl*, 9-7

Retrieving duplicate secondary keys

- example, (P) *Rec Mgmt Util*, 2-2

Retrieving records

- program example, (P) *RMS Ref*, A-27

Return address arrays, (P) *Concepts*, 19-9, 20-8

RETURN command, (G) *DCL N-Z*, DCLII-51 to DCLII-52

Return conditions

- wait, (P) *Interfaces*, 4-6

Return condition values, (P) *Modular Proc*, 2-21; (P) *Interfaces*, 3-6, 4-7

Returning data

- Alpha, (P) *Calling Std*, 3-52

Return key, (G) *User*, 3-18; (P) *I/O User*, 5-6

- logical successor, (P) *Debugger*, 8-8, 8-13, B-6
- to log in, (G) *DCL A-M*, DCLI-410

Returns, (P) *Interfaces*, 1-12

- address, (P) *Calling Std*, 3-37
- call frame, (P) *Interfaces*, 2-5
- condition value, (P) *Interfaces*, 2-22; (P) *Calling Std*, 6-1
- errors, (P) *Interfaces*, 2-22
- function value, (P) *Interfaces*, 2-22; (P) *Calling Std*, 2-6

- I/O status block, (P) *Interfaces*, 1-12, B-10

- in mailbox, (P) *Interfaces*, 1-12

- object, (P) *Interfaces*, B-10

Returns (cont'd)

- RTL routines, (P) *Interfaces*, 3-6
- signaled in register, (P) *Interfaces*, 1-12
- system service condition value, (P) *Interfaces*, 4-7

Returns heading

- in routine documentation, (P) *Interfaces*, 1-4

Return status, (P) *Concepts*, 13-21

- from signal, (P) *Concepts*, 13-71

Return symbols

- for RTL routines, (P) *Interfaces*, 3-6

Reverse Address Resolution Protocol

- See RARP

Reverse path caching, (S) *DECnet Mgmt*, 2-20

Reverse-search key option, (P) *File Appl*, 8-9, 8-17

- design characteristics, (P) *RMS Ref*, 6-15
- performance caching optimization, (P) *RMS Ref*, 6-15

- used with duplicate keys, (P) *RMS Ref*, 6-15

Revert to caller's handling, (P) *Calling Std*, 6-8

REVISION attribute, (P) *Rec Mgmt Util*, 4-15, 4-23; (P) *File Appl*, 4-32

Revision data, (P) *File Appl*, 9-10

Revision date and time

- establishing with XABDAT, (P) *RMS Ref*, 8-3

Revision number, (P) *Rec Mgmt Util*, 4-23

Rewind offline function, (P) *I/O User*, 3-18

/REWIND qualifier

- as Backup utility input save-set qualifier, (S) *Sys Mgmt Util A-L*, 7-54
- as Backup utility output save-set qualifier, (S) *Sys Mgmt Util A-L*, 7-55

Rewind service, (P) *RMS Ref*, RMS-93; (P) *File Appl*, 8-5

- condition values, (P) *RMS Ref*, RMS-94

- control block input fields, (P) *RMS Ref*, RMS-94

- control block output fields, (P) *RMS Ref*, RMS-94

- effect on next-record position, (P) *File Appl*, 8-18

- use restriction, (P) *RMS Ref*, RMS-94

REXMT flag, (S) *VMScluster Sys*, F-20

RF30 disk, (P) *I/O User*, 2-5

RF71 disk, (P) *I/O User*, 2-5

RFAs (record file addresses), (P) *Rec Mgmt Util*, 2-1, 3-1; (P) *File Appl*, 1-2, 8-14, 9-15, 10-28

- access, (P) *Rec Mgmt Util*, 3-1; (P) *File Appl*, 10-28

- created by CONVERT, (P) *File Appl*, 3-19

- use of table for rapid access, (P) *File Appl*, 8-3

RFC, (S) *TCP/IP*, 3-1

- description of, (S) *TCP/IP*, 1-6

Rights databases, (S) *Sys Mgr Essentials*, 5-8; (P) *Concepts*, 23-1, 23-8, 23-16

- adding identifiers, (S) *Security*, 8-6

- adding to, (P) *Concepts*, 23-12

- assigning identifiers to users, (S) *Security*, 8-7

- creating, (P) *Sys Svc I*, SYS1-114

- creating and maintaining, (S) *Security*, 8-5

- default protection, (P) *Concepts*, 23-9

- displaying, (S) *Security*, 8-6

- elements of, (P) *Concepts*, 23-10

- holder record, (P) *Concepts*, 23-8

- identifier records, (P) *Concepts*, 23-8

- initializing, (P) *Concepts*, 23-9

- keys, (P) *Concepts*, 23-9

- modifying, (P) *Concepts*, 23-13, 23-14, 23-16
- removing identifiers and holders, (S) *Security*, 8-7

- terminating context, (P) *Sys Svc I*, SYS1-303

Rights identifiers

- See Identifiers

RIGHTSLIST.DAT files, (G) *SW Overview*, 3-15

- adding identifiers to, (S) *Sys Mgmt Util A-L*, 5-20

- altering identifiers in, (S) *Sys Mgmt Util A-L*, 5-37

- auditing, (S) *Security*, 9-3

- authorization elements, (S) *VMScluster Sys*, 5-13

- creating and maintaining, (S) *Security*, 8-6; (S) *Sys Mgmt Util A-L*, 5-3, 5-26

- default protection, (S) *Sys Mgr Essentials*, 6-5

- deleting identifiers from, (S) *Sys Mgmt Util A-L*, 5-41

- displaying identifiers in, (S) *Sys Mgmt Util A-L*, 5-50

- displaying records in, (S) *Sys Mgmt Util A-L*, 5-54

- how UICs are stored, (S) *Security*, 4-3

- merging, (S) *VMScluster Sys*, B-3

- moving to reduce system disk I/O, (S) *Sys Mgr Tuning*, 16-8

- renaming identifiers, (S) *Sys Mgmt Util A-L*, 5-45

RIGHTSLIST logical name

- defining during system startup, (S) *Sys Mgr Essentials*, 5-8

- defining to reduce system disk I/O, (S) *Sys Mgr Tuning*, 16-8

Rights lists

- access arranged by capability, (S) *Security*, 2-8

- modifying, (G) *DCL N-Z*, DCLII-206

- process, (P) *Concepts*, 23-19

- system, (P) *Concepts*, 23-19

rights_holder data type, (P) *Interfaces*, B-15

rights_id data type, (P) *Interfaces*, B-15

Ring buffer

nonpaged pool history, (P) *VAX SDA*, SDA-134
/RING_BUFFER qualifier, (P) *Alpha SDA*,
SDA-120; (P) *VAX SDA*, SDA-134

rint routine, (P) *Portable Math*, DPML-50, B-12

RISC

See Architectures

RJOBIM parameter, (S) *Alpha Perform*, 1-5

RK06 cartridge disk, (P) *I/O User*, 2-5

RK07 cartridge disk, (P) *I/O User*, 2-5

RL02 cartridge disk, (P) *I/O User*, 2-4

RLBs (record lock blocks), (P) *Alpha SDA*,

SDA-76; (P) *VAX SDA*, SDA-81

RLK option, (P) *Rec Mgmt Util*, 4-11

RLOGIN, (S) *Sys Mgr Tuning*, 21-13

rlogin command, (S) *TCP/IP*, 3-3

RLOGIN utility, (S) *TCP/IP*, 3-2, 5-1

RM03 disk, (P) *I/O User*, 2-5

RM05 disk, (P) *I/O User*, 2-5

RMCP.EXE file, (S) *DECamsds*, B-3

RMDRIVER.EXE file, (S) *DECamsds*, B-3

RMS, (G) *SW Overview*, 3-4, 4-18 to 4-19; (P)
Environment, 10-16 to 10-18; (P) *Rec Mgmt*
Util, 5-3, 6-3; (P) *File Appl*, 1-18, 1-29,
1-30, 1-33

access to files at record level, (S) *Sys Mgr*
Essentials, 9-13

allocating buffers, (P) *File Appl*, 3-15, 3-18

allowable program execution modes, (P) *RMS*
Ref, 2-8

Analyze/RMS_File utility, (P) *Environment*,
10-18

and remote file access, (S) *DECnet Intro*, 2-12
applicable macro programming rules, (P) *RMS*
Ref, A-5

attributes, (P) *File Appl*, 1-31, 1-32

block I/O, (P) *RMS Ref*, 1-2, A-4

block I/O processing services, (P) *RMS Ref*, 1-2
blocking used to reduce I/O operations, (S) *VAX*
Perform, 3-9

bucket splits, (P) *File Appl*, 3-24

buffer parameters, (S) *VAX Perform*, 3-4

buffers, (S) *Alpha Perform*, 7-6, 18-5

calculating extension size, (P) *File Appl*, 3-14

calling example, (P) *RMS Ref*, A-10

calling sequence, (P) *RMS Ref*, 2-4

calling services, (P) *RMS Ref*, 1-1

calls, (S) *DECnet Mgmt*, 1-18

connect-time options, (P) *File Appl*, 4-2

consumption of executive mode processing time,
(S) *VAX Perform*, 3-14, 3-18; (S) *Alpha*
Perform, 9-9

control blocks, (P) *Environment*, 10-15, 10-16;

(P) *RMS Ref*, 1-3; (P) *Rec Mgmt Util*, 4-1;

(P) *File Appl*, 1-34, 4-13

with FDL routines, (P) *Util Routines*,

FDL-16, FDL-19

CONVERT, (P) *Environment*, 10-18

RMS (cont'd)

CONVERT/RECLAIM, (P) *Environment*, 10-18

Create/FDL utility, (P) *Environment*, 10-19

creation-time options, (P) *Rec Mgmt Util*, 5-2;
(P) *File Appl*, 4-2, 4-15

data structures, (P) *File Appl*, 1-34

data structures shown by SDA, (P) *Alpha SDA*,
SDA-75; (P) *VAX SDA*, SDA-80

default, (P) *Rec Mgmt Util*, 2-14, 4-18

deferred-write operation, (P) *File Appl*, 3-18,
3-28

device support, (P) *Environment*, 10-16

displaying data structures, (P) *Alpha SDA*,
SDA-128, SDA-143; (P) *VAX SDA*,
SDA-150, SDA-165

displaying default block count, (G) *DCL N-Z*,
DCLII-332

Edit/FDL utility, (P) *Environment*, 10-19

file organizations, (P) *RMS Ref*, 1-3

file tags in Mail, (G) *User*, 6-9

global symbols, (P) *Alpha SDA*, SDA-15,
SDA-61; (P) *VAX SDA*, SDA-64, SDA-65

image

base address, (P) *VAX SDA*, SDA-18

image activation, (P) *File Appl*, 5-5

implementation from high-level language, (P)
RMS Ref, 3-1

improving caching, (S) *VAX Perform*, 5-14; (S)
Alpha Perform, 18-5

in indexed files, (P) *File Appl*, 3-18

invoking at run time, (P) *RMS Ref*, A-1

MACRO parameter, (P) *File Appl*, 3-15

macros, (P) *Environment*, 10-17

misuse, (S) *VAX Perform*, 4-35; (S) *Alpha*
Perform, 15-3

modifying defaults for, (G) *DCL N-Z*,
DCLII-209

naming conventions, (P) *RMS Ref*, 1-1, A-3

opening file for mapping, (P) *Concepts*, 19-14,
20-14

optional arguments to, (P) *RMS Ref*, A-10

option selection, (P) *File Appl*, 9-1

overflow into P0, (P) *File Appl*, 7-16

passing argument list to, (P) *RMS Ref*, A-9

passing arguments to, (P) *RMS Ref*, 1-3

performance implications of file design, (S)
VAX Perform, 3-18; (S) *Alpha Perform*,
9-9

placing file information in prologs, (P) *File*
Appl, 3-18

program interface description, (P) *RMS Ref*,
2-1

Put service, (P) *Rec Mgmt Util*, 2-8

record access modes, (P) *RMS Ref*, 1-3

record formats, (P) *RMS Ref*, 1-3

restrictions to calling, (P) *RMS Ref*, 2-8

role in reclaiming buckets, (P) *Rec Mgmt Util*,
3-1

RMS (cont'd)

- security features, (P) *RMS Ref*, 1-3
- statistics
 - cache display, (P) *File Appl*, 3-31
 - determining when enabled, (P) *File Appl*, 3-30
 - displaying, (P) *File Appl*, 3-30
 - enabling gathering, (P) *File Appl*, 3-29
 - example of using, (P) *File Appl*, 3-30
 - impact on resources associated with global sections, (P) *File Appl*, 3-30
 - in Monitor utility, (S) *Sys Mgmt Util M-Z*, 1-43
 - restrictions to gathering, (P) *File Appl*, 3-29
 - using to improve performance, (P) *File Appl*, 3-30
- structures, (P) *Concepts*, 8-15
- supporting file operations, (P) *RMS Ref*, 1-3
- supporting record operations, (P) *RMS Ref*, 1-3
- truncation
 - error, (P) *File Appl*, 3-9
 - requesting, (P) *File Appl*, 3-9
 - use with large extends, (P) *File Appl*, 3-9
- use of DEC Multinational character set, (P) *RMS Ref*, 2-9
- use of multiblocks, (P) *File Appl*, 3-14
- use of reserved event flags, (P) *RMS Ref*, 2-8
- using with languages, (P) *File Appl*, 1-33
- utilities
 - ANALYZE/RMS_FILE, (P) *File Appl*, 1-35
 - CONVERT, (P) *File Appl*, 1-36
 - CONVERT/RECLAIM, (P) *File Appl*, 1-36
 - CREATE/FDL, (P) *File Appl*, 1-37
 - EDIT/FDL, (P) *File Appl*, 1-37
 - with Prolog 3 files, (P) *File Appl*, 10-28
- RMS\$OK_DUP alternate success status, (P) *RMS Ref*, 6-16
- RMS\$OK_LIM success status code, (P) *RMS Ref*, 6-14
- RMS\$XAB error, (P) *RMS Ref*, 10-12
- RMS (Record Management Services), (S) *TCP/IP*, 5-5
- RMS.EXE file, (P) *VAX SDA*, SDA-65
- RMS.STB file, (P) *Alpha SDA*, SDA-61
- RMS-11
 - block identifier field limitation, (P) *RMS Ref*, 4-4
 - stream files, (P) *Rec Mgmt Util*, 4-33
- RMS calling services, (P) *RMS Ref*, 1-1
- RMSDEF.STB file, (P) *Alpha SDA*, SDA-15; (P) *VAX SDA*, SDA-64
- RMS distributed file system, (S) *VMScluster Sys*, 1-4, 2-17
- RMS errors
 - recommended method for signaling, (P) *RMS Ref*, 2-6
- RMS Journaling, (G) *SW Overview*, 3-20, 7-6
 - Refer also to the *RMS Journaling for OpenVMS Manual*
 - as data integrity tool, (S) *Dependable*, 8-28
 - data integrity, (G) *SW Overview*, 2-13, 7-4
 - handling errors, (P) *Rec Mgmt Util*, 1-7, 1-8
 - how to turn off, (P) *Rec Mgmt Util*, 1-8
- RMS Journaling flag
 - example of testing for, (P) *RMS Ref*, 4-20
- RMS macros
 - arguments for service completion routines, (P) *RMS Ref*, A-10
 - capabilities listed, (P) *RMS Ref*, A-11
 - description, (P) *RMS Ref*, A-1
 - for creating and processing files, (P) *RMS Ref*, A-11
 - format, (P) *RMS Ref*, A-9
 - format rules, (P) *RMS Ref*, A-10
 - types, (P) *RMS Ref*, A-11
- /RMS qualifier, (P) *Alpha SDA*, SDA-128; (P) *VAX SDA*, SDA-150
- RMS service macros
 - format, (P) *RMS Ref*, A-10
- RMS symbol, (P) *VAX SDA*, SDA-18
- RMS_DEFAULT command, (P) *Rec Mgmt Util*, 4-29
- RMS_DFNBC system parameter
 - for specifying default network block count, (P) *RMS Ref*, 4-23
- RMS_EXTEND_SIZE system parameter, (S) *Sys Mgr Tuning*, 16-7; (S) *Alpha Perform*, 4-2
- RMS_FILEPROT system parameter, (S) *Security*, 5-11, 8-16, 8-19, C-10
- RMS_GBLBUFQUO system parameter, (P) *File Appl*, 1-38
- RMS_RELATED_CONTEXT option, (P) *Linker*, LINK-61
- RMTDBG_SCRATCH_PAGES system parameter, (G) *V6.2 New Feat*, 3-15
- RNE option, (P) *Rec Mgmt Util*, 4-14
- RNF option, (P) *Rec Mgmt Util*, 4-14
- Rolling upgrade, (S) *VMScluster Sys*, 10-3
- Root directory
 - adding to an existing system disk, (S) *Sys Mgr Essentials*, 2-31
- Rooted-device logical names, (P) *File Appl*, 6-14
- Rooted-directory specifications, (P) *File Appl*, 6-13 to 6-18
- Root level, (P) *File Appl*, 3-20
- Root volume
 - definition, (S) *Sys Mgr Essentials*, 8-31
 - MFD on, (S) *Sys Mgr Essentials*, 8-31
- Rotational latency, (P) *File Appl*, 1-10
- Round-robin scheduling, (S) *Alpha Perform*, 6-19, 9-6

- Routers, (S) *DECnet Intro*, 1-2, 3-8, 3-12; (S) *DECnet Mgmt*, 1-1, 1-12, 2-15, 3-33, 6-1
- area, (S) *DECnet Intro*, 1-3; (S) *DECnet Mgmt*, 1-2, 2-17
- definition, (S) *DECnet Mgmt*, 2-15
- designated, (S) *DECnet Mgmt*, 1-7, 2-15, 2-19
- LAN, (S) *DECnet Mgmt*, 1-7, 2-19
- Level 1, (S) *DECnet Intro*, 1-3; (S) *DECnet Mgmt*, 1-2, 2-15, 2-17
 - on Alpha systems, (S) *Comparison*, 6-3
- Level 2, (S) *DECnet Intro*, 1-3; (S) *DECnet Mgmt*, 1-2, 2-15, 2-17
 - on Alpha systems, (S) *Comparison*, 6-3
- network, (S) *Sys Mgr Tuning*, 21-5
- on VMScluster, (S) *DECnet Mgmt*, 1-10
- Phase IV, (S) *DECnet Mgmt*, 2-17
- X.25, (S) *DECnet Intro*, 1-6
- Route-through control, (S) *DECnet Mgmt*, 3-53
- Routines
 - See also String manipulation routines and Utility routines
 - breakpoint on, (P) *Debugger*, 3-9, 7-6
 - callable system, (G) *SW Overview*, 4-9
 - calling, (P) *Interfaces*, 3-1; (P) *Debugger*, 12-11, 15-22
 - call stack sequence, (P) *Debugger*, 3-6, 6-7
 - definition, (P) *Environment*, 10-3
 - displaying instructions for, on call stack, (P) *Debugger*, 3-22, 11-10
 - displaying register values for, on call stack, (P) *Debugger*, 3-22, 11-11
 - displaying source code for, on call stack, (P) *Debugger*, 3-22, 11-6
 - EXAMINE/SOURCE command, (P) *Debugger*, 10-4
 - how to call, (P) *Interfaces*, 3-3
 - industry-standard, (G) *SW Overview*, 4-9
 - multiple invocations of, (P) *Debugger*, 9-10
 - processwide resource allocation, (P) *Concepts*, 6-16
 - returning from, (P) *Debugger*, 3-7, 7-3
 - RTL, (G) *SW Overview*, 4-10
 - SET BREAK command, (P) *Debugger*, 7-6
 - SET SCOPE command, (P) *Debugger*, 9-11
 - SET TRACE command, (P) *Debugger*, 7-6
 - SHOW CALLS command, (P) *Debugger*, 6-7
 - STEP/INTO command, (P) *Debugger*, 7-3
 - stepping into, (P) *Debugger*, 3-7, 7-3
 - STEP/RETURN command, (P) *Debugger*, 7-3
 - system, (P) *Environment*, 10-1
 - traceback information, (P) *Debugger*, 9-3
 - tracepoint on, (P) *Debugger*, 7-6
 - variable-length bit field, (P) *Concepts*, 6-10
- Routing, (S) *TCP/IP*, 1-1, 1-2; (S) *DECnet Intro*, 1-2; (S) *DECnet Mgmt*, 2-15
 - adaptive, (S) *DECnet Intro*, 1-3
 - area, (S) *Sys Mgr Tuning*, 21-6; (S) *DECnet Intro*, 1-3; (S) *DECnet Mgmt*, 1-2, 2-16
- Routing
 - area (cont'd)
 - advantages, (S) *DECnet Mgmt*, 2-18
 - concepts, (S) *DECnet Mgmt*, 2-18
 - limiting number of areas, (S) *DECnet Mgmt*, 3-51
 - broadcast message timer, (S) *DECnet Mgmt*, 2-24
 - commands, (S) *DECnet Mgmt*, 3-49
 - concepts, (S) *DECnet Mgmt*, 2-21
 - configuration considerations, (S) *DECnet Mgmt*, 2-15
 - control parameters, (S) *DECnet Mgmt*, 3-51
 - cost, (S) *DECnet Mgmt*, 2-21
 - data, (S) *DECnet Intro*, 1-1
 - definition, (S) *DECnet Mgmt*, 1-1
 - displaying information, (S) *DECnet Intro*, 3-2
 - end node, (S) *DECnet Intro*, 1-2
 - equal cost path splitting, (S) *DECnet Mgmt*, 2-22, 3-53
 - hop, (S) *DECnet Intro*, 1-3; (S) *DECnet Mgmt*, 2-21
 - initialization passwords, (S) *DECnet Mgmt*, 1-10, 2-16, 2-29, 2-36, 3-67
 - IP, (S) *TCP/IP*, 2-6
 - levels of, (S) *Sys Mgr Tuning*, 21-5
 - maximum visits, (S) *DECnet Mgmt*, 2-22
 - message, (S) *DECnet Mgmt*, 2-23, 3-54
 - message timer, (S) *DECnet Mgmt*, 2-24
 - network
 - adaptive, (S) *Sys Mgr Tuning*, 21-5
 - definition, (S) *Sys Mgr Tuning*, 21-5
 - not supported on Alpha systems, (S) *Comparison*, 6-3
 - parameters, (S) *DECnet Mgmt*, 2-21
 - path, (S) *DECnet Intro*, 1-2; (S) *DECnet Mgmt*, 2-21
 - path, tracing, (S) *DECnet Intro*, 4-14
 - path control parameters, (S) *DECnet Mgmt*, 3-52
 - path cost, (S) *DECnet Intro*, 1-3; (S) *DECnet Mgmt*, 2-21
 - path length, (S) *DECnet Intro*, 1-3; (S) *DECnet Mgmt*, 2-21
 - problems, (S) *DECnet Intro*, 4-14
 - reachable node, (S) *DECnet Mgmt*, 2-21
 - route-through control parameters, (S) *DECnet Mgmt*, 3-53
 - segmented message, (S) *DECnet Mgmt*, 2-23
 - setting configuration limits, (S) *DECnet Mgmt*, 3-50
 - timer, (S) *DECnet Mgmt*, 3-54
 - timing of messages, (S) *DECnet Mgmt*, 2-24
 - verification, (S) *DECnet Mgmt*, 3-30
- Routing initialization passwords, (S) *Security*, 12-14

- Routing layer events, (S) *DECnet Mgmt Util*, D-4
- Routing nodes
 - See Routers
- Routing timer, (S) *DECnet Mgmt*, 2-24
- RP05 disk, (P) *I/O User*, 2-5
- RP06 disk, (P) *I/O User*, 2-5
- RP07 disk, (P) *I/O User*, 2-5
- RPC, (G) *SW Overview*, 2-10, 6-14
 - See DECrpc
- RPG II
 - data type declarations, (P) *Interfaces*, B-49
 - implementation table, (P) *Interfaces*, B-49
- RQDX3 disk controller, (P) *I/O User*, 2-3
- RR (round-robin) scheduling, (P) *DECthreads*, 2-5
- RRL option, (P) *Rec Mgmt Util*, 4-13
- RRV (record reference vector), (P) *Rec Mgmt Util*, 1-3; (P) *File Appl*, 3-10, 3-23
- RSA (register save area)
 - layout, (P) *Calling Std*, 3-12, 3-13
 - stack frames, (P) *Calling Std*, 3-12
- RSBs (resource blocks), (P) *Alpha SDA*, SDA-108, SDA-139; (P) *VAX SDA*, SDA-123, SDA-160
- RSM (Remote System Manager)
 - startup restrictions, (S) *Sys Mgr Tuning*, 23-12
- RSPID (response ID)
 - displaying SDA information, (P) *Alpha SDA*, SDA-144; (P) *VAX SDA*, SDA-166
- RSTs (run-time symbol tables), (P) *Debugger*, 9-5
 - and symbol search, (P) *Debugger*, 9-7
 - deleting symbol records in, (P) *Debugger*, 9-6
 - displaying modules in, (P) *Debugger*, 9-6
 - displaying symbols in, (P) *Debugger*, 9-8
 - inserting symbol records in, (P) *Debugger*, 9-6
 - shareable image, (P) *Debugger*, 9-13
- RSTS/E nodes, (S) *DECnet Mgmt*, 9-5
- RSX-11S systems
 - checkpointing tasks, (S) *DECnet Mgmt*, 4-18
 - downline load of system, (S) *DECnet Mgmt*, 4-1
 - NETGEN procedure, (S) *DECnet Mgmt*, 4-15
 - overlying tasks, (S) *DECnet Mgmt*, 4-18
 - task load, (S) *DECnet Mgmt*, 4-14
- RSX nodes, (S) *DECnet Mgmt*, 9-7, 9-9
- RSX systems
 - in network operations, (S) *DECnet Intro*, 1-6
 - specifying UIC format directory names, (G) *User*, 5-10
- RT-11 nodes, (S) *DECnet Mgmt*, 9-11
- RT-11 volume
 - block-addressable, (S) *Sys Mgr Essentials*, 9-24
- RTAn devices, (S) *Sys Mgr Essentials*, 7-11
- RTL mathematics (MTH\$)
 - Refer to the *OpenVMS VAX RTL Mathematics (MTH\$) Manual*
- RTLs (run-time libraries), (G) *SW Overview*, 3-4
 - routines, (G) *SW Overview*, 4-10
- RTPAD component of SET HOST, (P) *I/O User*, 5-11
- RTS, (P) *Environment*, 1-4
- rtVAX, (G) *SW Overview*, 1-14
- RUBs (recovery unit blocks), (P) *Alpha SDA*, SDA-76; (P) *VAX SDA*, SDA-81
- RUFBs (recovery unit file blocks), (P) *Alpha SDA*, SDA-76; (P) *VAX SDA*, SDA-81
- Rules for FDL validity, (P) *Rec Mgmt Util*, 6-1
- Rules to remember for dependable computing
 - complex applications require more sophisticated recovery strategies, (S) *Dependable*, 8-46
 - consider cable terminations when modifying DSSI configurations, (S) *Dependable*, 6-14
 - consider memory and I/O as well as CPU capacity, (S) *Dependable*, 4-11
 - continuous improvement means constant change, (S) *Dependable*, 2-4
 - disaster/risk management is for professionals, (S) *Dependable*, 5-8
 - eliminate single points of failure, (S) *Dependable*, 6-1
 - environmental maintenance equipment covered by UPS, (S) *Dependable*, 5-4
 - I/O throughput of Ethernet-only VMScluster systems, (S) *Dependable*, 6-12
 - include users in planning phase
 - preventing complaints in operational phase, (S) *Dependable*, 2-3
 - location of journal files, (S) *Dependable*, 8-39
 - personal safety is more important than system safety, (S) *Dependable*, 5-5
 - severely restrict use of BYPASS privilege, (S) *Dependable*, 8-49
 - stacking can make a small computer room more orderly, (S) *Dependable*, 5-7
 - water in an overcooled computer room can freeze, (S) *Dependable*, 5-4
- Runaway process fix, (S) *DECcmds*, 4-3
- Runaway tapes
 - stopping, (G) *DCL A-M*, DCLII-249
- RUN command
 - DCL command, (P) *Debugger*, 2-1, 2-6, 5-6, 5-7, 5-12, 9-4
 - debugger command, (P) *Debugger*, 5-7, 5-10, 5-12, 5-13, 9-13
 - effect of installed images on, (S) *Sys Mgr Tuning*, 16-10
 - used with search lists, (G) *User*, 13-30
 - with images, (G) *DCL N-Z*, DCLII-53, DCLII-54
 - abbreviating, (G) *DCL N-Z*, DCLII-53
 - with processes, (G) *User*, 18-4; (G) *DCL N-Z*, DCLII-55 to DCLII-64
 - creating detached processes, (G) *DCL N-Z*, DCLII-63

RUN command process
 qualifiers using Alpha pagelet values, (S)
 Comparison, 5-11

Runoff
 See DSR

RUNOFF command, (G) *DCL N-Z*, DCLII-65

RUNOFF/CONTENTS command, (G) *DCL N-Z*,
 DCLII-66 to DCLII-69

RUNOFF/INDEX command, (G) *DCL N-Z*,
 DCLII-70 to DCLII-73

Run time
 implementation of RMS, (P) *RMS Ref*, 3-1,
 A-11
 processing environment, (P) *RMS Ref*, 2-1

Run-time
 information to RMS listed, (P) *RMS Ref*, 1-5

Run-time access options, (P) *RMS Ref*, 1-4

Run-time attributes
 establishing value, (P) *Rec Mgmt Util*, 4-2

Run-time kitting
 creating shareable images for, (P) *Linker*,
 LINK-15

Run-time libraries
 See RTLs
 condition handling, (P) *Concepts*, 13-1
 on Alpha systems, (S) *Comparison*, B-4
 queue access, (P) *Concepts*, 6-12

Run-time library (RTL) routines
 LIB\$BUILD_NODESPEC, (G) *V6.2 New Feat*,
 4-1
 LIB\$COMPARE_NODENAME, (G) *V6.2 New Feat*,
 4-1
 LIB\$COMPRESS_NODENAME, (G) *V6.2 New Feat*,
 4-1
 LIB\$EXPAND_NODENAME, (G) *V6.2 New Feat*,
 4-1
 LIB\$FIT_NODENAME, (G) *V6.2 New Feat*,
 4-1
 LIB\$GET_FULLNAME_OFFSET, (G) *V6.2 New Feat*,
 4-1
 LIB\$GET_HOSTNAME, (G) *V6.2 New Feat*,
 4-1
 LIB\$TRIM_FULLNAME, (G) *V6.2 New Feat*,
 4-1

Run-time library routines
 accessing command language interpreter, (P)
 Concepts, 6-2
 accessing operating system components, (P)
 Concepts, 6-1
 accessing VAX instruction set, (P) *Concepts*,
 6-9
 calling, (P) *Interfaces*, 3-1, 3-3
 capabilities of, (P) *Environment*, 10-4
 conversion, (P) *LIB\$*, 1-7
 CVT\$, (P) *LIB\$*, 1-7
 definition, (P) *Environment*, 10-3
 entry point, (P) *Interfaces*, 3-3, 3-4, 3-6, 4-3
 general purpose, (P) *OTS\$*, 1-1

Run-time library routines (cont'd)
 integer and floating-point, (P) *Concepts*, 6-12
 interaction with operating system, (P)
 Concepts, 6-1
 jacket routine, (P) *Concepts*, 6-1
 library, (P) *LIB\$*, 1-1
 manipulating character string, (P) *Concepts*,
 6-14
 names, (P) *Interfaces*, 3-3
 on Alpha systems, (P) *Concepts*, 13-18
 output formatting control, (P) *Concepts*, 6-20
 performance measurement, (P) *Concepts*, 6-17
 return status, (P) *Concepts*, 13-21
 string manipulation, (P) *STR\$*, 2-1
 system service access, (P) *Concepts*, 6-1
 translated, (P) *LIB\$*, 1-6
 variable-length bit field instruction, (P)
 Concepts, 6-10

Run-time options
 example, (P) *File Appl*, 9-18 to 9-20
 specifying, (P) *File Appl*, 9-1 to 9-5

Run-time symbol tables
 See RSTs

RUSBs (recovery unit stream blocks), (P) *Alpha SDA*,
 SDA-76; (P) *VAX SDA*, SDA-81

RV60 optical disk drives
 supported by UETP, (S) *Sys Mgr Tuning*, 17-7

RVN (relative volume number)
 See File identification

RWAITCNT symbol, (P) *VAX SDA*, SDA-18

RWAST wait state, (S) *Alpha Perform*, 9-4

RWC option, (P) *Rec Mgmt Util*, 4-20

RWMBP wait state, (S) *Alpha Perform*, 9-4

RWMPE wait state, (S) *Alpha Perform*, 9-4

RWO option, (P) *Rec Mgmt Util*, 4-21

RWPGF wait state, (S) *Alpha Perform*, 9-4

RWSWP wait state, (S) *Alpha Perform*, 9-4

RX01 console disk, (P) *I/O User*, 2-6

RX02 diskette, (P) *I/O User*, 2-6

RX23 diskette, (P) *I/O User*, 2-7

RX33 diskette, (P) *I/O User*, 2-7

RX50 diskette, (P) *I/O User*, 2-7

RZ22 disk, (P) *I/O User*, 2-7

RZ23 disk, (P) *I/O User*, 2-7

RZ55 disk, (P) *I/O User*, 2-7

S

S0 region
 examining, (P) *Alpha SDA*, SDA-49; (P) *VAX SDA*,
 SDA-56

SAG (SQL Access Group), (G) *SW Overview*, 6-10

Samples
 a company's first steps to dependability, (S)
 Dependable, 2-11
 dependability requirements worksheet, (S)
 Dependable, 2-9

Samples (cont'd)

- LAVC\$FAILURE_ANALYSIS.MAR program,
(S) *Dependable*, 7-9 to 7-11
- mapping options to requirements, (S)
Dependable, 2-13
- multiadapter connections to LAN segments, (S)
Dependable, 7-6
- proposed dependability enhancements, (S)
Dependable, 2-13

Satellite booting, (S) *Dependable*, 7-9

Satellite links, (S) *DECnet Intro*, 1-2, 1-7

Satellite loader

See SLD

Satellite nodes

- adding, (S) *VMScluster Sys*, 8-13, 8-15
- altering local disk labels, (S) *VMScluster Sys*,
8-40
- booting, (S) *VMScluster Sys*, 9-5, 9-6
- disabling conversational bootstrap operations,
(S) *VMScluster Sys*, 8-10
- failure to boot, (S) *VMScluster Sys*, C-4, C-6
- failure to join the cluster, (S) *VMScluster Sys*,
C-13
- functions, (S) *VMScluster Sys*, 3-7
- local disk used for paging and swapping, (S)
VMScluster Sys, 3-7
- maintaining network configuration data, (S)
VMScluster Sys, 10-5
- modifying LAN hardware address, (S)
VMScluster Sys, 8-22
- obtaining LAN hardware address, (S)
VMScluster Sys, 8-5
- rebooting if operating system installed on local
disk, (S) *VMScluster Sys*, 8-41
- removing, (S) *VMScluster Sys*, 8-18
- restoring network configuration data, (S)
VMScluster Sys, 10-5
- startup controlled by DECbootsync, (S)
VMScluster Sys, 9-11
- system files created by CLUSTER_
CONFIG.COM procedure, (S) *VMScluster
Sys*, 8-1
- updating network data in NETNODE_
REMOTE.DAT, (S) *VMScluster Sys*, 8-39

Satellites

- booting, (G) *V6.2 New Feat*, 6-27; (S) *Sys Mgr
Tuning*, 22-20
- booting across architectures, (S) *VMScluster
Sys*, 10-5
- boot process, (S) *VMScluster Sys*, 3-7
- controlling booting, (S) *VMScluster Sys*, 9-10
- cross-architecture booting, (G) *V6.2 New Feat*,
6-30; (S) *Sys Mgr Tuning*, 22-23
- downline loading, (S) *VMScluster Sys*, 9-9
- LAN MOP and DECnet MOP downline load
service, (G) *V6.2 New Feat*, 6-28; (S) *Sys
Mgr Tuning*, 22-20

Satellites (cont'd)

- maintaining network data for, (S) *VMScluster
Sys*, 5-19
- migrating to LAN MOP downline load service,
(G) *V6.2 New Feat*, 6-28; (S) *Sys Mgr
Tuning*, 22-20
- preparing to boot, (S) *VMScluster Sys*, 9-4
- troubleshooting booting, (S) *VMScluster Sys*,
C-5
- Satellite transmission control, (S) *DECnet Mgmt*,
3-44
- SATELLITE_PAGE.COM command procedure, (S)
Sys Mgr Essentials, 5-6; (S) *Sys Mgr Tuning*,
15-20
- execution of during system startup, (S) *Sys
Mgr Essentials*, 5-5
- SAVE command, (P) *Debugger*, 11-22
- in Show Cluster utility, (S) *Sys Mgmt Util
M-Z*, 4-48
- SAVEDUMP system parameter, (S) *Sys Mgr
Tuning*, 15-2, 15-3, 15-7; (P) *Alpha SDA*,
SDA-4, SDA-28; (P) *VAX SDA*, SDA-5
- Save sets, (S) *Sys Mgr Essentials*, 10-6, 10-23;
(P) *File Appl*, 10-29
- description of, (S) *Sys Mgmt Util A-L*, 7-3
- directing output to, (S) *Sys Mgmt Util A-L*,
7-11
- Files-11 disk, (S) *Sys Mgr Essentials*, 10-7
- Get Save Set
- VMSINSTAL.COM option, (S) *Sys Mgr
Essentials*, 3-15
- in network operations, (S) *DECnet Intro*, 2-9
- listing the contents of, (S) *Sys Mgr Essentials*,
10-18
- magnetic tape, (S) *Sys Mgr Essentials*, 10-6
- multivolume, (S) *Sys Mgr Essentials*, 10-29
- name, (S) *Sys Mgr Essentials*, 10-24
- network, (S) *Sys Mgr Essentials*, 10-7
- on multiple tapes, (S) *Sys Mgr Essentials*,
10-21
- product
- storing temporarily during installation, (S)
Sys Mgr Essentials, 3-15
- sequential disk, (S) *Sys Mgr Essentials*, 10-7
- types, (S) *Sys Mgr Essentials*, 10-6
- Save-set specification, (S) *Sys Mgmt Util A-L*, 7-5
- /SAVE_SET qualifier
- as Backup utility input save-set qualifier, (S)
Sys Mgmt Util A-L, 7-58
- as Backup utility output save-set qualifier, (S)
Sys Mgmt Util A-L, 7-58
- /SAVE_VECTOR_STATE qualifier, (P) *Debugger*,
15-22
- Saving breakpoints, (P) *Debugger*, 2-5, 5-9
- Saving the queue database, (S) *Sys Mgr
Essentials*, 12-11

- SBR register
 - displaying, (P) *VAX SDA*, SDA-96
- SBs (system blocks), (P) *Alpha SDA*, SDA-81, SDA-94; (P) *VAX SDA*, SDA-87, SDA-105
- SB symbol, (P) *VAX SDA*, SDA-18
- SCA architecture
 - NISCA transport protocol, (S) *VMScluster Sys*, F-1, F-3
 - protocol levels, (S) *VMScluster Sys*, F-1, F-3
- Scalability
 - Refer also to the *Guidelines for VMScluster Configurations*
 - predicting future software requirements, (S) *Dependable*, 8-30
- Scalars
 - definition, (S) *Sys Mgr Tuning*, 26-4
 - processor synchronization, (P) *Calling Std*, 2-8
 - register usage, (P) *Calling Std*, 2-1
- Scalar types, (P) *Debugger*, 8-15
- scalb routine, (P) *Portable Math*, DPML-51, B-12
- SCAN
 - data type declarations, (P) *Interfaces*, B-51
 - implementation table, (P) *Interfaces*, B-51
- Scanning
 - for devices, (P) *Sys Svc I*, SYS1-200
 - intrusion database, (P) *Sys Svc II*, SYS2-223
- SCBB register
 - displaying, (P) *Alpha SDA*, SDA-87; (P) *VAX SDA*, SDA-96
- SCBB symbol, (P) *Alpha SDA*, SDA-16
- SCBs (storage control blocks)
 - in storage bit map file, (S) *Sys Mgr Tuning*, A-8
- SCF option, (P) *Rec Mgmt Util*, 4-24
- Scheduler
 - definition, (S) *Alpha Perform*, 6-1
 - global symbols, (P) *Alpha SDA*, SDA-61; (P) *VAX SDA*, SDA-65
- Scheduling, (S) *Sys Mgr Essentials*, 6-2, 6-31
 - See also Priority
 - of batch jobs, (S) *Sys Mgr Essentials*, 13-72
 - of print jobs, (S) *Sys Mgr Essentials*, 13-32, 13-72
 - overview, (S) *VAX Perform*, 2-25
 - real-time processes, (S) *Alpha Perform*, 6-20
 - round-robin, (S) *Alpha Perform*, 6-19, 9-6
 - states
 - compute (COM), (S) *Alpha Perform*, 9-1
 - compute outswapped (COMO), (S) *Alpha Perform*, 9-1
 - tuning, (S) *Alpha Perform*, 6-20
 - wait states, (S) *Alpha Perform*, 9-3
 - types of, (S) *Alpha Perform*, 9-3
- Scheduling jobs, (G) *SW Overview*, 3-2
- Scheduling policy
 - obtaining for thread, (P) *DECthreads*, pthread-45, cma-67
- Scheduling policy (cont'd)
 - setting for thread, (P) *DECthreads*, pthread-72, cma-73
- Scheduling policy attribute, (P) *DECthreads*, 2-5, pthread-16, cma-26
 - obtaining, (P) *DECthreads*, pthread-9, cma-18
- Scheduling priority attribute, (P) *DECthreads*, 2-6
- Scheduling states, (S) *VAX Perform*, 3-11 to 3-12
 - isolating CPU limitations, (S) *VAX Perform*, 4-32
- Scheduling thread, (P) *DECthreads*, 2-16
- Scheduling timer, (S) *DECnet Mgmt*, 3-43
- Scope
 - definition of, (P) *DECthreads*, 3-5
- Scopes
 - built-in symbol, (P) *Debugger*, 11-6, 11-9, B-11
 - canceling, (P) *Debugger*, 9-11
 - current, (P) *Debugger*, 3-22, 9-10
 - default, (P) *Debugger*, 9-7
 - displaying, (P) *Debugger*, 9-11
 - for instruction display, (P) *Debugger*, 3-22, 11-10
 - for register display, (P) *Debugger*, 3-22, 11-11
 - for source display, (P) *Debugger*, 3-22, 11-6
 - for symbol search, (P) *Debugger*, 3-22, 3-23, 7-7, 9-7, 9-10
 - PC, (P) *Debugger*, 3-23, 9-7
 - relation to call stack, (P) *Debugger*, 3-22, 9-9, 9-10, 9-11, 11-6, 11-10, 11-11
 - SEARCH command, (P) *Debugger*, 10-6
 - search list, (P) *Debugger*, 3-23, 9-7, 9-10
 - SET SCOPE command, (P) *Debugger*, 9-10, 11-6, 11-10, 11-11
 - setting, (P) *Debugger*, 3-22, 9-10
 - specifying with path name, (P) *Debugger*, 9-8
 - TYPE command, (P) *Debugger*, 10-4
 - vector register, (P) *Debugger*, 15-1
- Scratch files, (P) *Rec Mgmt Util*, 2-8
- Screen clearing, (S) *Security*, 3-20, C-9
- Screen displays
 - See Displays
- Screen management, (P) *Concepts*, 7-7
 - See also Virtual displays
 - debugging DECwindows Motif application, (P) *Debugger*, 2-8
 - debugging screen-oriented program, (P) *Debugger*, 2-9, 13-5
 - definition of, (P) *SMG\$*, 1-1
 - deleting text, (P) *Concepts*, 7-22
 - double-width characters, (P) *Concepts*, 7-19, 7-20
 - drawing lines, (P) *Concepts*, 7-21
 - inserting characters, (P) *Concepts*, 7-19
 - menus
 - creating, (P) *Concepts*, 7-22
 - reading, (P) *Concepts*, 7-24

- Screen management
 - menus (cont'd)
 - types of, (P) *Concepts*, 7-22
 - reading data, (P) *Concepts*, 7-23
 - resources, (P) *Modular Proc*, 2-15
 - scrolling, (P) *Concepts*, 7-20
 - setting background color, (P) *Concepts*, 7-10
 - setting screen dimensions, (P) *Concepts*, 7-10
 - using system routines, (P) *Environment*, 10-2
 - video attributes, (P) *Concepts*, 7-21
 - viewports, (P) *Concepts*, 7-18
- Screen mode, (P) *Debugger*, 11-1
 - built-in symbol, (P) *Debugger*, 11-23, 11-24
 - multiprocess program, (P) *Debugger*, 14-15
 - predefined windows, (P) *Debugger*, 11-24
- Screen-oriented programs
 - debugging, (P) *Debugger*, 2-8, 2-9, 13-5
- Screens
 - minimal update, (P) *SMG\$*, 2-16
 - refreshing from LATCP, (S) *Sys Mgmt Util A-L*, 13-24
- Screen sizes
 - displaying, (P) *Debugger*, 11-23
 - %PAGE, %WIDTH symbols, (P) *Debugger*, 11-23
 - setting, (P) *Debugger*, 11-22
- Scribe programs
 - capturing traffic data, (S) *VMScluster Sys*, F-38
- /SCRIPT qualifier, (P) *File Appl*, 10-26
- Scripts
 - EDIT/FDL, (P) *Rec Mgmt Util*, 6-15
 - executing Optimize without terminal dialogue, (P) *Rec Mgmt Util*, 6-7
 - generating Indexed, (P) *Rec Mgmt Util*, 6-11
 - invoking, (P) *Rec Mgmt Util*, 6-15
 - list of, (P) *File Appl*, 4-4
 - Optimize, (P) *File Appl*, 10-1
 - using with FDL ANALYSIS_OF_AREA and ANALYSIS_OF_KEY sections, (P) *Rec Mgmt Util*, 1-25
 - restrictions on use of Design and Add Key scripts, (P) *Rec Mgmt Util*, 6-4
 - selecting response method, (P) *Rec Mgmt Util*, 6-9
 - specifying FDL file with Optimize, (P) *Rec Mgmt Util*, 6-4
 - specifying title, (P) *Rec Mgmt Util*, 6-10
 - Touch-up, (P) *File Appl*, 10-26
 - using Optimize with ANALYSIS_OF_AREA and ANALYSIS_OF_KEY sections, (P) *Rec Mgmt Util*, 1-25
 - using Optimize with special analysis sections, (P) *Rec Mgmt Util*, 1-12
 - using with INVOKE command, (P) *Rec Mgmt Util*, 6-11
- SCROLL command, (S) *Sys Mgr Tuning*, 20-13; (P) *Debugger*, 11-11
 - in LATCP, (S) *Sys Mgmt Util A-L*, 13-25
 - in Show Cluster utility, (S) *Sys Mgmt Util M-Z*, 4-49
- Scrolling
 - backward, (P) *Concepts*, 7-20
 - down, (P) *Concepts*, 7-20
 - forward, (P) *Concepts*, 7-20
 - output, (P) *Concepts*, 7-20
 - up, (P) *Concepts*, 7-20
- SCROLL keypad function, (S) *Sys Mgr Tuning*, 20-7; (S) *Sys Mgmt Util M-Z*, B-3
- Scroll modes
 - jump, (P) *SMG\$*, SMG-355
 - smooth, (P) *SMG\$*, SMG-355
- /SCROLL qualifier, (P) *Debugger*, 11-20
- SCS (System Communications Services), (G) *SW Overview*, 3-18; (S) *Alpha Perform*, 9-7
 - base address, (P) *VAX SDA*, SDA-18
 - definition, (S) *VMScluster Sys*, 1-4
 - displaying SDA information, (P) *Alpha SDA*, SDA-80, SDA-81, SDA-84, SDA-124, SDA-144; (P) *VAX SDA*, SDA-86, SDA-87, SDA-91, SDA-141, SDA-166
 - global symbols, (P) *Alpha SDA*, SDA-15; (P) *VAX SDA*, SDA-64
 - SHOW CLUSTER information, (S) *Sys Mgmt Util M-Z*, 4-3
 - statistics in Monitor utility, (S) *Sys Mgmt Util M-Z*, 1-46
- SCSBUFFCNT system parameter, (S) *VMScluster Sys*, 9-19
- SCSCONNCNT system parameter, (S) *VMScluster Sys*, 9-18
- SCSDEF.STB file, (P) *Alpha SDA*, SDA-15; (P) *VAX SDA*, SDA-64
- SCSI (Small Computer Systems Interface), (G) *SW Overview*, 1-6, A-2; (S) *Sys Mgr Essentials*, 10-40; (S) *Sys Mgr Tuning*, 21-9
 - class driver, (P) *I/O User*, 8-3
 - class/port architecture, (P) *I/O User*, 8-2
 - cluster-accessible disks, (S) *VMScluster Sys*, 1-3
 - disk class driver, (P) *I/O User*, 2-18
 - disks, (S) *VMScluster Sys*, 1-4, 2-17
 - class driver, (P) *I/O User*, 2-17
 - error recovery, (P) *I/O User*, 2-13, 2-17
 - enabling disconnect feature, (P) *I/O User*, 8-7
 - handling errors in audio applications, (P) *I/O User*, 2-23
 - hardware compliance, (P) *I/O User*, 7-2
 - port driver, (P) *I/O User*, 8-2
 - \$QIO interface to disk class driver, (P) *I/O User*, 2-19
 - support for compliant hardware, (S) *VMScluster Sys*, 6-23

- Secondary exception vectors, (P) *Concepts*, 13-24
- Secondary index data record
 - See SISR
- Secondary indexes
 - See Alternate indexes
- Secondary keys
 - duplicate retrieval order, (P) *Rec Mgmt Util*, 2-2
- Secondary loaders, (S) *DECnet Mgmt*, 4-8
- Secondary page and swap files, (S) *Sys Mgr Tuning*, 15-5
 - See also Page files and Swap files
 - creating
 - in system startup, (S) *Sys Mgr Tuning*, 15-20
 - with AUTOGEN, (S) *Sys Mgr Tuning*, 15-17, 15-24
 - with SYPAGSWPFILES.COM procedure, (S) *Sys Mgr Tuning*, 15-20
 - improving system performance, (S) *Sys Mgr Tuning*, 16-8
 - installing
 - in system startup, (S) *Sys Mgr Tuning*, 15-20
 - requirement, (S) *Sys Mgr Tuning*, 15-5
 - with SYPAGSWPFILES.COM command procedure, (S) *Sys Mgr Tuning*, 15-20
 - installing during system startup, (S) *Sys Mgr Essentials*, 5-6
- Secondary page cache, (S) *Alpha Perform*, 10-4, 10-5
 - evaluating, (S) *VAX Perform*, 3-24, 3-34; (S) *Alpha Perform*, 10-5, 11-6
 - free-page list, (S) *Alpha Perform*, 5-2
 - modified-page list, (S) *Alpha Perform*, 5-2
- Secondary passwords
 - length, (G) *User*, 2-6
- Secondary processors, (S) *Sys Mgr Tuning*, 26-2
- Secondary services
 - effect on next-record position, (P) *File Appl*, 8-18
- Secondary storage, (S) *Alpha Perform*, 5-2
- Second-level trimming, (S) *Alpha Perform*, 6-12
 - See also Memory management
- SECSRV\$CLIENT
 - reserved identifier, (S) *Security*, 13-3
- SECSRV\$COMMUNICATION
 - reserved identifier, (S) *Security*, 13-3
- SECSRV\$OBJECT
 - reserved identifier, (S) *Security*, 13-3
- Section files, (S) *Alpha Perform*, 5-2
 - updating asynchronously, (P) *Sys Svc II*, SYS2-409
 - updating synchronously, (P) *Sys Svc II*, SYS2-414
- Sections, (P) *Concepts*, 19-13, 20-12
 - characteristic, (P) *Concepts*, 19-15, 20-15
 - creating, (P) *Concepts*, 19-14, 20-13; (P) *Sys Svc I*, SYS1-156
 - defining extent, (P) *Concepts*, 19-15, 20-15
 - deleting, (P) *Concepts*, 8-11, 19-23, 20-24, 20-25
 - deleting global, (P) *Sys Svc I*, SYS1-204
 - global, (S) *Sys Mgr Tuning*, 16-12; (P) *Concepts*, 17-8
 - global paging file, (P) *Concepts*, 19-20, 20-21
 - image, (P) *Concepts*, 19-23, 20-25
 - mapping, (P) *Concepts*, 8-4, 19-18, 20-18; (P) *Sys Svc I*, SYS1-156
 - page frame, (P) *Concepts*, 19-24, 20-26
 - pages, (S) *Sys Mgr Tuning*, 16-12
 - paging, (P) *Concepts*, 19-20, 19-21, 20-22, 20-23
 - private, (P) *Concepts*, 8-5
 - releasing, (P) *Concepts*, 19-23, 20-24
 - sharing data, (P) *Concepts*, 19-22, 20-24
 - unmapping, (P) *Concepts*, 19-23, 20-24
 - updating, (P) *Concepts*, 8-11
 - writing back, (P) *Concepts*, 19-23, 20-25
 - writing modifications to disk, (P) *Sys Svc II*, SYS2-409, SYS2-414
- Section type, (P) *Alpha SDA*, SDA-127, SDA-138
- /SECTION_BINDING qualifier, (P) *Linker*, LINK-26
 - creating resident shareable images, (P) *Linker*, 1-16
 - improving the performance of installed shareable images, (P) *Linker*, 4-11
- section_id data type, (P) *Interfaces*, B-15
- section_name data type, (P) *Interfaces*, B-15
- Sectors, (P) *File Appl*, 1-10
 - Files-11
 - definition, (S) *Sys Mgr Tuning*, A-2
- Sector translation, (P) *I/O User*, 2-14
- Secure terminal servers, (S) *Security*, 3-14, 7-26
- Security, (S) *DECams*, 1-3; (P) *Environment*, 10-2
 - See also Protection
 - administrator, (G) *User*, 2-5
 - alarms
 - enabling, (S) *Sys Mgr Tuning*, 18-29
 - assessing auditing requirements, (S) *Security*, 9-10
 - at the network circuit level, (S) *DECnet Intro*, 3-37
 - at the network node level, (S) *DECnet Intro*, 3-36
 - at the network system level, (S) *DECnet Intro*, 3-36
 - auditing, (G) *DCL N-Z*, DCLII-95
 - auditing subsystem, (G) *SW Overview*, 3-14
 - audit log files, (G) *User*, 19-11

Security (cont'd)

- authenticating user's identity, (S) *Sys Mgr Tuning*, 21-14
- authentication, (G) *SW Overview*, 3-16
- B1 class, (G) *SW Overview*, 3-14
- C2 class, (G) *SW Overview*, 3-14, A-2
- checking privileges, (P) *Sys Svc I*, SYS1-93, SYS1-98
- converting message from binary to ASCII, (P) *Sys Svc I*, SYS1-321
- customizing files, (S) *DECamds*, 1-7
- Data Analyzer file, (S) *DECamds*, A-14
- data center policies, (S) *Dependable*, 9-19
- data protection mechanisms, (G) *User*, 19-3; (S) *Security*, 4-6
- Data Provider file, (S) *DECamds*, A-13
- data transfer, (S) *DECamds*, 1-4
- DCE Security Server, (P) *Environment*, 3-6
- definition of levels, (S) *Security*, 1-2
- disposing of hardcopy output, (G) *User*, 2-26
- enabling operator terminals, (S) *Sys Mgr Tuning*, 18-21
- environmental factors, (S) *Security*, 1-3; (S) *Dependable*, 5-4
- erasing data on disk, (S) *Security*, 5-12
- file protection, (G) *SW Overview*, 3-14; (S) *DECamds*, 1-4
- filtering sensitive message information, (P) *Sys Svc I*, SYS1-321
- for DECnet node, (S) *DECnet Intro*, 3-34 to 3-38
- for devices, (G) *User*, 12-2
- for dynamic asynchronous connection, (S) *DECnet Intro*, 3-25; (S) *DECnet Mgmt*, 1-10
- for point-to-point connection, (S) *DECnet Mgmt*, 2-36, 3-67
- for static asynchronous connection, (S) *DECnet Intro*, 3-21
- getting erase patterns, (P) *Sys Svc I*, SYS1-265
- hashing passwords, (P) *Sys Svc II*, SYS2-100
- high-level, (G) *User*, 19-10
- highwater marking, (S) *Security*, 5-12
- image, (P) *Debugger*, 9-5
- LAN encryption, (G) *SW Overview*, 6-7
- locking the data center, (S) *Dependable*, 3-5
- logging issues with OPCOM, (S) *DECamds*, 1-4
- managing auditing, (S) *Security*, 9-23
- managing default protection and ownership, (S) *Security*, 8-15
- messages in operator log file, (S) *Sys Mgr Tuning*, 18-21
- modifying characteristics of an object, (P) *Sys Svc II*, SYS2-292
- network, (G) *SW Overview*, 6-7; (S) *DECnet Intro*, 3-38
- See also DECnet and Networks

Security

network (cont'd)

- providing for, (S) *Sys Mgr Tuning*, 21-12
- objects protected by system, (S) *Security*, 4-10
- OPCOM alarm messages, (S) *Sys Mgr Tuning*, 18-21
- OpenVMS services for PC clients, (G) *SW Overview*, 6-23
- OpenVMS system, (G) *SW Overview*, 3-14, 3-15
- operating system model, (S) *Security*, 2-1
- optimizing file security, (S) *Security*, 5-13
- password, (G) *SW Overview*, 3-14
- password management, (S) *Sys Mgr Essentials*, 11-2
- performance impact
 - auditing, (S) *Security*, 9-12
- private LAN transport, (S) *DECamds*, 1-3
- process privileges, (S) *DECamds*, 1-4
- protected subsystems, (S) *Sys Mgr Essentials*, 8-28
- protecting network configuration files, (S) *DECnet Mgmt*, 2-33
- protecting public disk volumes, (S) *Sys Mgr Essentials*, 8-15
- protecting queues, (S) *Sys Mgr Essentials*, 13-22
- protecting the system dump file, (S) *Sys Mgr Tuning*, 15-4
- protection mask, (G) *SW Overview*, 3-10
- read-only access, (S) *DECamds*, 1-9
- retrieving information about objects, (P) *Sys Svc II*, SYS2-84
- risk of compromise by installing images with privileges, (S) *Sys Mgr Tuning*, 16-13
- services enabled by PATHWORKS, (P) *Environment*, 3-5
- software, (G) *SW Overview*, 2-15
- specifying alarm events, (S) *Sys Mgr Tuning*, 18-21
- steps after installing
 - Data Analyzer, (S) *DECamds*, A-14
 - Data Provider, (S) *DECamds*, A-13
- system services, (P) *Environment*, 10-6, 10-12
- terminal, (P) *Debugger*, 13-6
- Trojan horse programs, (S) *Security*, 5-14
- user access, (G) *SW Overview*, 5-1
- VMScluster, (S) *Sys Mgr Tuning*, 20-16
- VMScluster requires single domain, (S) *VMScluster Sys*, 5-10
- SECURITY.AUDIT\$JOURNAL files, (S) *Security*, 9-18
- SECURITY.EXE file
 - global symbols, (P) *VAX SDA*, SDA-65
- SECURITY.STB file
 - global symbols, (P) *Alpha SDA*, SDA-61

SECURITY.SYS file

See Volume security profile

Security administrators

C2 requirements, (S) *Security*, C-10

checklist for maintaining a secure system, (S) *Security*, 6-8

cluster managers and, (S) *Security*, 11-1

goals of, (S) *Security*, 1-1

personal accounts, (S) *Security*, 6-4

privilege requirements, (S) *Security*, 6-4

role of, (S) *Security*, 6-1

system passwords and, (S) *Security*, 3-3

training users, (S) *Security*, 3-21, 6-5

Security Alarm ACEs

See Alarm ACEs

Security alarm messages

specifying access criteria for, (S) *Sys Mgmt Util A-L*, 1-6, 1-8

Security alarms, (G) *User*, 19-10; (S) *Security*, 3-18

applications, (S) *Sys Mgr Essentials*, 11-13

audit log file, (S) *Security*, C-8

disabling on system consoles, (S) *Security*, 9-15

events to enable as, (S) *Security*, 9-3, 9-12

events triggering, (S) *Security*, 3-19

example of enabling events, (S) *Security*, 9-10

sample messages, (S) *Security*, 9-1, D-1

Security archive files

analyzing, (S) *Sys Mgmt Util A-L*, 4-4

losing the remote link to, (S) *Security*, 9-29

Security attacks, forms of, (S) *Security*, 1-1, 10-1

Security Audit ACEs

See Audit ACEs

Security audit data packets

fields, (S) *Sys Mgmt Util A-L*, F-6

format, (S) *Sys Mgmt Util A-L*, F-6

Security audit event flags, (S) *Sys Mgmt Util A-L*, F-6

Security audit event messages

changing disk transfer rate, (S) *Security*, 9-28

controlling delivery to server, (S) *Security*, 9-26

data packets in, (S) *Sys Mgmt Util A-L*, F-6

delaying delivery at startup, (S) *Security*, 9-25

event flags, (S) *Sys Mgmt Util A-L*, F-6

format, (S) *Sys Mgmt Util A-L*, F-1

subtypes for events, (S) *Sys Mgmt Util A-L*, F-2

types of events, (S) *Sys Mgmt Util A-L*, F-2

when to ignore, (S) *Security*, 9-17

Security audit header packets, (S) *Sys Mgmt Util A-L*, F-2

Security auditing, (G) *User*, 19-10; (S) *Security*, 3-17, 10-4; (S) *Sys Mgr Essentials*, 11-13

See also Audit server processes

account and file access, (G) *User*, 19-10

Security auditing (cont'd)

adding ACEs to files, (G) *User*, 19-12

analyzing audit log files, (S) *Security*, 9-17

archive files, (S) *Security*, 9-16

assessing site requirements, (S) *Security*, 9-10

audit server databases, (S) *Security*, 9-24

C2 system restrictions, (S) *Security*, C-8

capability objects, (S) *Security*, 5-2

cluster considerations, (S) *Security*, 11-5

common event flag clusters, (S) *Security*, 5-3

controlling event messages, (S) *Security*, 9-26

deciding when to use, (G) *User*, 19-12

default auditing events, (S) *Security*, 2-6

default characteristics, (S) *Security*, 9-24

defining log file in system startup, (S) *Sys Mgr Essentials*, 5-9

description, (S) *Sys Mgr Tuning*, 18-25

devices, (S) *Security*, 5-7

directories, (S) *Security*, 5-11

disabling auditing, (S) *Security*, 9-25

disabling events, (S) *Security*, 9-3; (S) *Sys Mgr Tuning*, 18-28

disabling resource monitoring, (S) *Security*, 9-29

displaying using SHOW AUDIT command, (S) *Sys Mgr Tuning*, 18-27

effective use, (S) *Security*, 9-17

enabling auditing, (S) *Security*, 9-25

enabling event classes, (S) *Security*, 9-3

enabling events, (S) *Security*, 9-2

enabling operator terminal, (S) *Sys Mgr Tuning*, 18-29

error handling, (S) *Security*, 9-28, 9-29

excluding processes from suspension, (S) *Security*, 9-27

files, (S) *Security*, 5-11

global sections, (S) *Security*, 5-15

granularity of events, (S) *Security*, 4-29

high security needs, (S) *Security*, 1-2, 9-11

listener devices, (S) *Security*, 9-16

logical name tables, (S) *Security*, 5-17

low security needs, (S) *Security*, 1-2, 9-10

managing the audit server, (S) *Security*, 9-23

memory limitations and, (S) *Security*, 9-27

messages, (G) *User*, 19-11; (S) *Security*, 3-18

moderate security needs, (S) *Security*, 1-2, 9-10

object class enabled, (S) *Security*, 4-29

overview, (S) *Security*, 9-1

performance impact, (S) *Security*, 9-12

queues, (S) *Security*, 5-18

reporting object access, (S) *Security*, 4-29

reporting object use, (S) *Security*, 4-5

resource domains, (S) *Security*, 5-19

security class objects, (S) *Security*, 5-20

sending event messages to archive files, (S) *Security*, 9-15, 9-16

Security auditing (cont'd)

- sending event messages to mailboxes, (S) *Security*, 9-16
- sending event messages to operator terminals, (S) *Security*, 9-15
- server process, creation during system startup, (S) *Sys Mgr Essentials*, 5-5
- synchronizing cluster time, (S) *Security*, 9-28
- volumes, (S) *Security*, 5-21

Security-auditing ACEs

- See also Alarm ACEs and Audit ACEs
- position in ACL, (S) *Security*, 4-21

- Security-auditing events, (G) *User*, 19-10; (S) *Security*, 3-19; (P) *Sys Svc I*, SYS1-43, SYS1-61
- based on security needs, (S) *Security*, 9-10
- classes of, (S) *Security*, 9-7
- default classes, (S) *Security*, 9-1, 9-3, 9-10
- disabling all classes, (S) *Security*, 9-11
- displaying, (S) *Security*, 9-3
- enabling all classes, (S) *Security*, 9-11
- enabling as alarms, (S) *Security*, 9-10
- enabling as audits, (S) *Security*, 9-10
- example, (S) *Security*, 9-3
- network, (S) *Security*, 12-2
- reporting, (S) *Security*, 9-3, 9-12, 9-13
- sending to audit log files, (S) *Security*, 9-13
- sending to listener mailboxes, (S) *Security*, 9-16
- sending to operator terminals, (S) *Security*, 9-15
- sending to remote archive files, (S) *Security*, 9-15
- suppressing privilege audits, (S) *Security*, 9-8
- suppressing process control audits, (S) *Security*, 9-8

- system services for, (S) *Security*, 9-9

Security audit log files, (G) *User*, 19-11; (S) *Security*, 2-6, 3-18

- See also Audit Analysis utility

- advancing to next record, (S) *Sys Mgmt Util A-L*, 4-29
- advantages of, (S) *Security*, 9-12
- allocating disk space, (S) *Security*, 9-28
- analyzing, (S) *Sys Mgmt Util A-L*, 4-4
- C2 systems and, (S) *Security*, C-8
- changing location, (S) *Security*, 9-14
- changing message transfer rate, (S) *Security*, 9-28
- characteristics, (S) *Security*, 9-13
- creating, (S) *Security*, 9-13
- data packet format, (S) *Sys Mgmt Util A-L*, F-6
- definition, (S) *Sys Mgr Tuning*, 18-2
- description, (S) *Security*, 9-13
- displaying records, (S) *Sys Mgmt Util A-L*, 4-25

Security audit log files (cont'd)

- displaying the full record, (S) *Sys Mgmt Util A-L*, 4-9
- events to report, (S) *Security*, 9-12
- excluding information from reports, (S) *Sys Mgmt Util A-L*, 4-9
- header packet format, (S) *Sys Mgmt Util A-L*, F-1
- interactive analysis, (S) *Security*, 9-21
- maintaining, (S) *Security*, 9-13
- opening new input file, (S) *Sys Mgmt Util A-L*, 4-28
- pre-extending, (S) *Security*, 9-29
- procedures, (S) *Security*, 9-13
- resuming processing, (S) *Sys Mgmt Util A-L*, 4-25
- returning to previous record, (S) *Sys Mgmt Util A-L*, 4-29
- reviewing, (S) *Sys Mgr Tuning*, 18-26
- selecting records by event class, (S) *Sys Mgmt Util A-L*, 4-7
- selecting records by time, (S) *Sys Mgmt Util A-L*, 4-5, 4-22
- selecting records from, (S) *Security*, 9-20
- specifying duration of record display, (S) *Sys Mgmt Util A-L*, 4-12
- writing alarm messages to, (S) *Sys Mgmt Util A-L*, 1-8

Security audit records

- criteria for selecting, (S) *Sys Mgmt Util A-L*, 4-12

Security audit reports, (S) *Security*, 9-17 to 9-22; (S) *Sys Mgmt Util A-L*, 4-3 to 4-30

- advancing the display, (S) *Sys Mgmt Util A-L*, 4-29
- binary output, (S) *Sys Mgmt Util A-L*, 4-6
- brief format, (S) *Sys Mgmt Util A-L*, 4-7
- creating, (S) *Sys Mgmt Util A-L*, 4-4
- directing output, (S) *Sys Mgmt Util A-L*, 4-11
- displaying selection criteria, (S) *Sys Mgmt Util A-L*, 4-30
- duration of record display, (S) *Sys Mgmt Util A-L*, 4-12
- excluding information, (S) *Sys Mgmt Util A-L*, 4-9
- full format, (S) *Sys Mgmt Util A-L*, 4-9
- interrupting the display, (S) *Sys Mgmt Util A-L*, 4-25
- modifying selection criteria, (S) *Sys Mgmt Util A-L*, 4-25
- processing additional log files, (S) *Sys Mgmt Util A-L*, 4-28
- resuming the processing, (S) *Sys Mgmt Util A-L*, 4-25
- rights identifiers in, (S) *Security*, 4-5
- summary of records, (S) *Sys Mgmt Util A-L*, 4-23

Security breaches, handling, (S) *Security*, 1-1, 10-6

Security characteristics
 modifying for an object, (P) *Sys Svc II*, SYS2-292
 retrieving for an object, (P) *Sys Svc II*, SYS2-84

Security checklists
 for C2 systems, (S) *Security*, C-10
 for designing a secure system, (S) *Security*, 2-9
 for maintaining a secure system, (S) *Security*, 6-8
 for training users, (S) *Security*, 6-5
 for users, (S) *Security*, 3-21

Security class object, (S) *Security*, 5-19 to 5-20
 definition, (S) *Security*, 4-10

Security Enhancement Service software
 See SEVMS

Security event classes
 extracting audit records by, (S) *Sys Mgmt Util A-L*, 4-7

Security event messages
 extracting from log files, (S) *Sys Mgmt Util A-L*, 4-4

Security features, (G) *Compatibility*, 1-7
 access controls, (S) *Security*, 4-1, 7-1
 account duration, (G) *User*, 2-16, 2-17; (S) *Security*, 3-12, 3-13, 7-3
 auditing, (S) *Security*, 3-17, 9-1, 10-4
 automatic password generation, (S) *Security*, 3-10, 7-13
 break-in evasion, (G) *User*, 2-12
 dialup retries, (G) *User*, 2-12; (S) *Security*, 3-9
 erase-on-allocate, (S) *Security*, 8-28
 erase-on-delete, (S) *Security*, 8-28
 erasure patterns, (S) *Security*, 5-12
 highwater marking, (S) *Security*, 8-28
 intrusion detection, (S) *Security*, 3-9, 7-15
 login class restrictions, (G) *User*, 2-11; (S) *Security*, 3-8, 7-2
 password changes, (S) *Security*, 3-9
 password expiration, (G) *User*, 2-16; (S) *Security*, 3-12, 7-17
 password protection, (S) *Security*, 3-13, 7-22
 password requirements, (S) *Security*, 3-4, 7-19
 password restrictions, (S) *Security*, 3-2, 7-13
 passwords, (S) *Security*, 7-13 to 7-23
 protected subsystems, (S) *Security*, 13-1
 proxy accounts, (S) *Security*, 12-10
 proxy logins, (S) *Security*, 3-15, 12-4
 secondary passwords, (S) *Security*, 3-4, 3-11
 secure terminal servers, (G) *User*, 2-18; (S) *Security*, 3-14, 7-25
 security alarms, (G) *User*, 19-10; (S) *Security*, 3-18
 shift restrictions, (G) *User*, 2-12; (S) *Security*, 3-8

Security features (cont'd)
 system passwords, (S) *Security*, 3-3, 3-8

Security kernel, definition, (S) *Security*, 2-2

Security levels, (S) *Security*, 1-4
 event monitoring and, (S) *Security*, 9-10
 high, (S) *Security*, 1-2, 3-17
 low, (S) *Security*, 1-2, 3-17
 medium, (S) *Security*, 1-2

Security management, (S) *Security*, 6-1; (S) *Sys Mgr Essentials*, 6-16

See also Access control, Password management, and Protection

cluster group number and password, (S) *VMSScluster Sys*, 2-14

controlling conversational bootstrap operations, (S) *VMSScluster Sys*, 8-10

for clusters, (S) *Security*, 11-2, 11-3

in SYSMAN on remote nodes, (S) *Sys Mgr Essentials*, 2-16

managing audit log file, (S) *Security*, 11-5

membership integrity, (S) *VMSScluster Sys*, 5-10

modifying cluster group number, (S) *Security*, 11-7; (S) *VMSScluster Sys*, 10-16

modifying cluster password, (S) *Security*, 11-7; (S) *VMSScluster Sys*, 10-16

network, (S) *VMSScluster Sys*, 5-17

overview, (S) *VMSScluster Sys*, 10-15

policy development, (S) *Security*, 1-2, 6-1, 10-1

protected objects, cluster-visible, (S) *Security*, 11-6

protected objects, databases, (S) *Security*, 11-6

protecting queues, (S) *Sys Mgr Essentials*, 13-22 to 13-26

synchronizing authorization data, (S) *Security*, 11-4

VMS\$OBJECTS database, (S) *VMSScluster Sys*, 5-16

Security objects
 classes, (S) *Sys Mgmt Util A-L*, 1-4

Security operators
 sending alarm messages to audit log files, (S) *Sys Mgmt Util A-L*, 1-8
 sending alarm messages to terminals, (S) *Sys Mgmt Util A-L*, 1-6

Security operator terminals, (S) *Security*, 9-15; (S) *Sys Mgr Tuning*, 18-29

SECURITY privilege, (S) *Security*, A-15; (S) *DECnet Mgmt*, 5-1

hidden ACEs and, (S) *Security*, 4-21

Security problems
 anonymity of network and dialup users, (S) *Security*, 7-3
 autologin accounts, reducing, (S) *Security*, 7-11
 categories of, (S) *Security*, 1-1
 disk scavenging, (S) *Security*, 5-12
 hardcopy terminal output, (S) *Security*, 3-20

Security problems (cont'd)

- logging out, (S) *Security*, 3-19
- network access control strings, (S) *Security*, 3-14
- password detection, (S) *Security*, 3-11
- telephone system as, (S) *Security*, 10-7

Security profiles

- assigning to new devices, (S) *Security*, 5-6
- capability object, (S) *Security*, 5-2
- changing objects, (G) *User*, 19-3
- common event flag clusters, (S) *Security*, 5-3
- devices, (S) *Security*, 5-6
- displaying, (P) *Concepts*, 23-20
- displaying class defaults, (S) *Security*, 8-23
- displaying objects, (G) *User*, 19-3
- displaying processes, (G) *User*, 19-2
- displaying users, (G) *User*, 19-2
- files, (S) *Security*, 4-27, 5-8, 5-9
- global sections, (S) *Security*, 5-15
- in access evaluations, (S) *Security*, 4-11
- logical name tables, (S) *Security*, 5-16
- modification requirements, (S) *Security*, 4-11, 4-28

modifying, (P) *Concepts*, 23-21

objects, (G) *User*, 19-3; (S) *Security*, 4-6

ACLs, (S) *Security*, 4-8

changing, (S) *Security*, 4-9

contents, (S) *Security*, 4-7

deleting ACLs, (S) *Security*, 4-22

displaying, (S) *Security*, 4-9

modifying class templates, (S) *Security*, 8-24

origin of, (S) *Security*, 4-7

owner element, (S) *Security*, 4-7

protection codes, (S) *Security*, 4-7, 4-24

processes, (S) *Security*, 4-1

displaying, (G) *User*, 19-2; (S) *Security*, 4-4

identifiers, (S) *Security*, 4-3

privileges, (S) *Security*, 4-5

UICs, (S) *Security*, 4-2

queues, (S) *Security*, 5-17

resource domains, (S) *Security*, 5-19

security class, (S) *Security*, 5-20

users, (S) *Security*, 4-1

displaying, (G) *User*, 19-2; (S) *Security*, 4-4

identifiers, (S) *Security*, 4-3

privileges, (S) *Security*, 4-5

UICs, (S) *Security*, 4-2, 4-3

volumes, (S) *Security*, 5-21

Security restrictions

- captive command procedures, (S) *Security*, 7-9
- login class, (G) *User*, 2-11; (S) *Security*, 3-8
- on command usage, (S) *Security*, 8-27
- on mode of operation, (S) *Security*, 7-3
- shift, (G) *User*, 2-12
- shifts, (S) *Security*, 3-8, 7-2

Security restrictions (cont'd)

- time-of-day, (G) *User*, 2-12; (S) *Security*, 3-8, 7-2

Security server

- starting, (S) *Sys Mgr Essentials*, 5-5

Security Server process, (S) *Security*, 7-31

- intrusion database, (G) *V6.2 New Feat*, 3-17; (S) *Sys Mgr Essentials*, 11-7

- network proxy database, (G) *V6.2 New Feat*, 3-18; (S) *Sys Mgr Essentials*, 11-7

Security triplet, (S) *DECams*, 1-5 to 1-7, Glossary-2

Security using Kerberos, (S) *TCP/IP*, 3-3

SECURITY_AUDIT.AUDIT\$JOURNAL file

- moving to reduce system disk I/O, (S) *Sys Mgr Tuning*, 16-8

SECURITY_POLICY system parameter, (S) *Security*, 11-6, C-10

SECURITY_SERVER

- starting, (S) *Sys Mgr Essentials*, 5-5

Seek operation, (P) *I/O User*, 2-13

Seek time, (P) *File Appl*, 1-10

Segmented keys, (P) *RMS Ref*, 12-12; (P) *Rec Mgmt Util*, 4-29; (P) *File Appl*, 2-20

- restriction against overlapping, (P) *RMS Ref*, 12-12

SEGN secondary attribute

- ordering within KEY section, (P) *Rec Mgmt Util*, 6-1

SEGN_LENGTH attribute, (P) *Rec Mgmt Util*, 4-29

SEGN_POSITION attribute, (P) *Rec Mgmt Util*, 4-29

SELECT command, (P) *Debugger*, 11-19

- in Mail, (G) *User*, 6-4, 6-13

- in SHOW CLUSTER, (S) *Sys Mgr Tuning*, 20-13

- in Show Cluster utility, (S) *Sys Mgmt Util M-Z*, 4-50

Selecting a systems integrator, (S) *Dependable*, 3-11

Selective dump, (S) *Sys Mgr Tuning*, 15-3

Selective searches

- specifying the /SELECTIVE_SEARCH qualifier, (P) *Linker*, LINK-28

/SELECTIVE_SEARCH qualifier, (P) *Linker*, 2-14

/SELECT qualifier

- in Backup utility, (S) *Sys Mgmt Util A-L*, 7-59

Self-relative queue

- validating, (P) *Alpha SDA*, SDA-160; (P) *VAX SDA*, SDA-185

/SELF_RELATIVE qualifier, (P) *Alpha SDA*, SDA-160; (P) *VAX SDA*, SDA-185

Semantics tags

- See File tags

- SET CLUSTER/EXPECTED_VOTES command, (G) *DCL N-Z*, DCLII-111 to DCLII-112
- SET command, (G) *DCL N-Z*, DCLII-82 to DCLII-84
- establishing volatile network database, (S) *DECnet Intro*, 3-10, 3-33
 - (Field), (S) *Sys Mgmt Util M-Z*, 4-52
 - in conversational boot, (S) *Sys Mgr Essentials*, 4-6
 - in SYSGEN, (S) *Sys Mgmt Util M-Z*, 5-15
 - NCP, (S) *Sys Mgr Tuning*, 21-11
- SET COMMAND command, (G) *DCL N-Z*, DCLII-113 to DCLII-115
- SET CONTROL=T command, (G) *User*, 2-21
- SET CONTROL command, (G) *DCL N-Z*, DCLII-116 to DCLII-117
- SET CPU command, (P) *Alpha SDA*, SDA-11, SDA-68; (P) *VAX SDA*, SDA-14, SDA-72
- analyzing a running system, (P) *Alpha SDA*, SDA-10; (P) *VAX SDA*, SDA-11
- SET DAY command, (G) *DCL N-Z*, DCLII-118
- SET DEFAULT command, (G) *DCL N-Z*, DCLII-119 to DCLII-120; (S) *Sys Mgmt Util M-Z*, 1-60; (P) *File Appl*, 6-13
- in Monitor utility, (S) *Sys Mgmt Util M-Z*, 1-60
 - setting a default device with, (G) *User*, 5-6
 - setting a default directory with, (G) *User*, 5-5
 - /TRANSLATION_ATTRIBUTES qualifier, (P) *File Appl*, 6-14
- SET DEFINE command, (P) *Debugger*, 12-6
- SET DEVICE command, (G) *DCL N-Z*, DCLII-121 to DCLII-122
- in LANCIP utility, (S) *Sys Mgmt Util A-L*, 12-22, 12-26
 - spooling printers, (S) *Sys Mgr Essentials*, 7-14
- SET DEVICE/SERVED command, (G) *DCL N-Z*, DCLII-123
- SET DIRECTORY command, (G) *DCL N-Z*, DCLII-124 to DCLII-126
- changing directory characteristics, (S) *Sys Mgr Essentials*, 9-12
 - limiting disk space consumed, (S) *Sys Mgr Essentials*, 8-8
 - modifying disk file characteristics, (S) *Sys Mgr Essentials*, 9-8
- SET DISPLAY command, (G) *DCL N-Z*, DCLII-127 to DCLII-132
- SET EDITOR command, (P) *Environment*, 9-5; (P) *Debugger*, 5-4
- in Mail, (G) *User*, 6-18
- SET ENTRY command, (G) *User*, 18-16; (G) *DCL N-Z*, DCLII-133 to DCLII-142; (S) *Sys Mgr Essentials*, 13-70
- changing forms, (S) *Sys Mgr Essentials*, 13-80
 - changing scheduling priority, (S) *Sys Mgr Essentials*, 13-72
- SET ENTRY command (cont'd)
- comparison on Alpha and VAX systems, (S) *Comparison*, 3-6
 - holding jobs, (S) *Sys Mgr Essentials*, 13-71
 - qualifiers to, (G) *User*, 18-16
 - qualifiers using Alpha pagelet values, (S) *Comparison*, 5-11
 - releasing jobs, (S) *Sys Mgr Essentials*, 13-71
 - requencing pending jobs, (S) *Sys Mgr Essentials*, 13-73
 - specifying job retention, (S) *Sys Mgr Essentials*, 13-74
- SET ENVIRONMENT command, (S) *Sys Mgr Essentials*, 2-14
- in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-52
- SET EVENT_FACILITY command, (P) *Debugger*, 16-30
- SET EXECUTOR ALL command, (S) *DECnet Mgmt Util*, 3-63
- SET EXECUTOR command, (S) *Comparison*, 6-7; (S) *DECnet Intro*, 3-36; (S) *DECnet Mgmt Util*, 3-64
- DEFAULT ACCESS parameter, (S) *DECnet Mgmt*, 2-34
- INCOMING PROXY parameter, (S) *DECnet Mgmt*, 2-35
- local node address, (S) *DECnet Mgmt*, 3-8
- OUTGOING PROXY parameter, (S) *DECnet Mgmt*, 2-35
- SET EXECUTOR NODE command, (S) *DECnet Mgmt*, 3-6; (S) *DECnet Mgmt Util*, 3-73
- access control information, (S) *DECnet Mgmt*, 3-69
- SET FILE command, (G) *DCL N-Z*, DCLII-143 to DCLII-149
- /ACL qualifier, (P) *File Appl*, 4-27
 - example, (S) *Sys Mgr Essentials*, 6-33
 - for changing global buffer count value, (P) *RMS Ref*, 4-19
 - for storing journaling attributes, (P) *RMS Ref*, 4-20
 - /GLOBAL_BUFFERS qualifier, (P) *File Appl*, 3-12, 7-20
 - modifying disk file characteristics, (S) *Sys Mgr Essentials*, 9-8
 - using to assign an alias, (S) *Sys Mgr Essentials*, 9-10
 - using to modify file characteristics, (S) *Sys Mgr Essentials*, 9-10
- SET FILE/EXTENSION=n command, (P) *File Appl*, 3-7
- SET FILE/SEMANTICS command
- example of tagging file, (P) *File Appl*, 4-19
- SET FILE/STATISTICS command, (P) *File Appl*, 3-29
- SET FILE/UNLOCK command
- not supported on Alpha systems, (S) *Comparison*, B-2

- SET FOLDER command, (G) *User*, 6-13
- SET FUNCTION command, (S) *Sys Mgr Tuning*, 20-7; (S) *Sys Mgmt Util M-Z*, B-3
 - in SHOW CLUSTER, (S) *Sys Mgr Tuning*, 20-13
 - in Show Cluster utility, (S) *Sys Mgmt Util M-Z*, 4-53
- SET HOST command, (G) *User*, 2-9; (G) *DCL N-Z*, DCLII-150 to DCLII-152; (G) *SW Overview*, 5-2; (G) *Compatibility*, A-2; (S) *Security*, 3-5; (S) *Sys Mgr Tuning*, 21-13
 - and network security, (S) *DECnet Intro*, 3-34
 - command terminal, (S) *DECnet Mgmt*, 8-2
 - heterogeneous command terminal, (S) *DECnet Mgmt*, 1-18
 - in network operations, (S) *DECnet Intro*, 2-2
 - on Alpha systems, (S) *Comparison*, 6-2
 - on OpenVMS Alpha systems, (G) *Compatibility*, 2-6
 - to access remote node, (S) *DECnet Intro*, 3-3
- SET HOST/DTE command, (G) *DCL N-Z*, DCLII-153
 - in network operations, (S) *DECnet Intro*, 3-26
- SET HOST/DUP command, (G) *DCL N-Z*, DCLII-160, DCLII-161
- SET HOST facility, (P) *I/O User*, 5-11
- SET HOST/HSC command, (G) *DCL N-Z*, DCLII-162, DCLII-163
- SET HOST/LAT command, (G) *V6.2 New Feat*, 3-18; (G) *DCL N-Z*, DCLII-164 to DCLII-168; (S) *Sys Mgr Tuning*, 24-2
- SET HOST/RLOGIN command, (S) *TCP/IP*, 3-3, 5-1, 5-2
- SET HOST/TELNET command, (S) *TCP/IP*, 3-2, 5-1, 5-3
- SET HOST/TN3270 command, (S) *TCP/IP*, 3-2, 5-1, 5-4
- SET IMAGE command, (P) *Debugger*, 9-14
- SET INTERVAL command
 - in Show Cluster utility, (S) *Sys Mgmt Util M-Z*, 4-54
- SET KEY command, (G) *DCL N-Z*, DCLII-169; (P) *Debugger*, 12-9
- SET KNOWN NODES command, (S) *DECnet Intro*, 3-18
- SET KNOWN PROXIES ALL command, (S) *DECnet Mgmt*, 3-72; (S) *DECnet Mgmt Util*, 3-75
- SET LANGUAGE command, (P) *Debugger*, 8-10
- SET LINE ALL command, (S) *DECnet Mgmt Util*, 3-76
- SET LINE command, (S) *DECnet Mgmt Util*, 3-77
- SET LINK command
 - in LATCP, (S) *Sys Mgmt Util A-L*, 13-26
- SET LOG command, (P) *Debugger*, 12-5; (P) *Alpha SDA*, SDA-70; (P) *VAX SDA*, SDA-75
 - compared with SET OUTPUT command, (P) *Alpha SDA*, SDA-70; (P) *VAX SDA*, SDA-75
- SET LOGGING ALL command, (S) *DECnet Mgmt Util*, 3-85
- SET LOGGING command, (S) *DECnet Mgmt*, 3-72
 - to set logging sink state, (S) *DECnet Intro*, 4-5
- SET LOGGING EVENTS command, (S) *DECnet Mgmt*, 3-62; (S) *DECnet Mgmt Util*, 3-86
- SET LOGGING STATE command, (S) *DECnet Mgmt*, 3-62; (S) *DECnet Mgmt Util*, 3-88
- SET LOGINS command, (G) *DCL N-Z*, DCLII-170; (S) *Sys Mgr Tuning*, 16-4; (S) *VMScluster Sys*, 4-7
- SET MAGTAPE command, (G) *DCL N-Z*, DCLII-171, DCLII-172; (S) *Sys Mgr Essentials*, 7-16, 8-42
- SET MAGTAPE/RETENSION command, (G) *DCL N-Z*, DCLII-171
- SET MARGINS command, (P) *Debugger*, 10-8
- SET MESSAGE command, (G) *DCL N-Z*, DCLII-173, DCLII-174
 - used to access uninstalled messages, (G) *Help Msg*, 2-7
- Set Mode
 - Set Mac qualifier, (P) *I/O User*, 9-43
- Set modes
 - magnetic tape, (P) *I/O User*, 3-19
 - mailbox, (P) *I/O User*, 4-11
 - terminal, (P) *I/O User*, 5-40
- SET MODE [NO]DYNAMIC command, (P) *Debugger*, 9-6, 9-13
- SET MODE [NO]INTERRUPT command, (P) *Debugger*, 14-6
- SET MODE [NO]KEYPAD command, (P) *Debugger*, 12-8, A-1
- SET MODE [NO]OPERANDS command, (P) *Debugger*, 8-19
- SET MODE [NO]SCREEN command, (P) *Debugger*, 11-1
- SET MODE [NO]SEPARATE command, (P) *Debugger*, 2-9, 13-5
- SET MODE [NO]SYMBOLIC command, (P) *Debugger*, 8-13
- SET MODULE command, (P) *Debugger*, 9-6, 9-15
- SET MODULE CONFIGURATOR command, (S) *DECnet Intro*, 4-6; (S) *DECnet Mgmt Util*, 3-90
- STATUS display, (S) *DECnet Mgmt*, 3-35
- SET MODULE X25-ACCESS command, (S) *DECnet Mgmt Util*, 3-92
- SET MODULE X25-PROTOCOL command, (S) *DECnet Mgmt Util*, 3-94

- SET MODULE X25-SERVER command, (S) *DECnet Mgmt Util*, 3-100
- SET MODULE X29-SERVER command, (S) *DECnet Mgmt Util*, 3-100
- SET NOCONTROL=Y command
disabling Ctrl/Y, (G) *User*, 15-40
- SET NODE ALL command, (S) *DECnet Mgmt Util*, 3-105
- SET NODE CIRCUIT command, (S) *DECnet Mgmt Util*, 3-111
- SET NODE command, (S) *DECnet Mgmt*, 7-4;
(S) *DECnet Mgmt Util*, 3-106
- ACCESS parameter, (S) *DECnet Mgmt*, 2-34
- in LANCP utility, (S) *Sys Mgmt Util A-L*, 12-28
- in LATCP, (S) *Sys Mgmt Util A-L*, 13-27
- remote node name and address, (S) *DECnet Mgmt*, 3-8
- SET NOLOG command, (P) *Alpha SDA*, SDA-70;
(P) *VAX SDA*, SDA-75
- SET NOON command
in command procedures, (G) *User*, 15-33
with command levels, (G) *User*, 15-34
- SET OBJECT ALL command, (S) *DECnet Mgmt Util*, 3-112
- SET OBJECT command, (S) *DECnet Intro*, 3-36;
(S) *DECnet Mgmt Util*, 3-113
- PROXY parameter, (S) *DECnet Mgmt*, 2-36
- SET ON command, (G) *DCL N-Z*, DCLII-175
with command levels, (G) *User*, 15-34
- SET OUTPUT command, (P) *Alpha SDA*, SDA-71;
(P) *VAX SDA*, SDA-76
compared with SET LOG command, (P) *Alpha SDA*, SDA-70;
(P) *VAX SDA*, SDA-75
- SET/OUTPUT command
in SYSGEN, (S) *Sys Mgmt Util M-Z*, 5-16
- SET OUTPUT [NO]LOG command, (P) *Debugger*, 12-5
- SET OUTPUT [NO]SCREEN_LOG command, (P) *Debugger*, 12-6
- SET OUTPUT [NO]VERIFY command, (P) *Debugger*, 12-2
- SET OUTPUT_RATE command, (G) *User*, 18-14;
(G) *DCL N-Z*, DCLII-176
- SETPARAMS.DAT file, (S) *Sys Mgr Tuning*, 14-18;
(S) *Sys Mgmt Util A-L*, 6-7
- SETPARAMS phase of AUTOGEN, (S) *Sys Mgmt Util A-L*, 6-7
- SET PASSWORD command, (G) *User*, 2-13;
(G) *DCL N-Z*, DCLII-177 to DCLII-179; (G) *Compatibility*, A-2; (S) *Security*, 3-9, 3-10
automatic password generation, (G) *User*, 2-14
- SET PORT command
in LATCP, (S) *Sys Mgmt Util A-L*, 13-35
- SET PREFIX command, (G) *User*, 18-14; (G) *DCL N-Z*, DCLII-180, DCLII-181
- SET PRINTER command, (G) *DCL N-Z*, DCLII-182 to DCLII-184; (S) *Sys Mgr Essentials*, 7-13, 13-14
in system startup, (S) *Sys Mgr Essentials*, 5-12
- SET PROCESS command, (G) *DCL N-Z*, DCLII-185 to DCLII-188; (P) *Debugger*, 14-7, 14-8; (P) *Alpha SDA*, SDA-10, SDA-72; (P) *VAX SDA*, SDA-12, SDA-77
/NAME qualifier, (G) *User*, 18-3
- SET PROCESS/PRIVILEGES command, (S) *DECnet Intro*, 3-7
- SET PROFILE command
in SYSMAN, (S) *Sys Mgr Essentials*, 2-17; (S) *Sys Mgmt Util M-Z*, 6-54
- SET PROMPT command, (G) *DCL N-Z*, DCLII-189; (P) *Debugger*, 5-12
multiprocess program, (P) *Debugger*, 14-2
- SET PROTECTION command, (G) *DCL N-Z*, DCLII-190 to DCLII-192; (P) *File Appl*, 4-26
/DEFAULT qualifier, (G) *User*, 19-5
for network file security, (S) *DECnet Intro*, 3-35
- SET PROTECTION/DEFAULT command, (G) *DCL N-Z*, DCLII-193
- SET PROTECTION/DEVICE command, (G) *DCL N-Z*, DCLII-194 to DCLII-195
- SETPRV privilege, (S) *Security*, A-15
- SET QUEUE command, (G) *DCL N-Z*, DCLII-196 to DCLII-203; (S) *Sys Mgr Essentials*, 13-53
assigning a default form, (S) *Sys Mgr Essentials*, 13-63
assigning characteristics, (S) *Sys Mgr Essentials*, 13-59, 13-81
canceling characteristics, (S) *Sys Mgr Essentials*, 13-59
controlling page overflow, (S) *Sys Mgr Essentials*, 13-44
/ENTRY qualifier, (G) *User*, 18-16
in Mail, (G) *User*, 6-16
mounting a form, (S) *Sys Mgr Essentials*, 13-64
qualifiers to, (G) *User*, 18-16
qualifiers using Alpha pagelet values, (S) *Comparison*, 5-11
setting block limits, (S) *Sys Mgr Essentials*, 13-32
setting scheduling policy, (S) *Sys Mgr Essentials*, 13-32
setting UIC-based protection on queues, (S) *Sys Mgr Essentials*, 13-23
specifying banner pages, (S) *Sys Mgr Essentials*, 13-60
specifying job processing options, (S) *Sys Mgr Essentials*, 13-31
specifying queue options with, (S) *Sys Mgr Essentials*, 13-19
specifying reset modules, (S) *Sys Mgr Essentials*, 13-65

- SET QUORUM command
 avoiding use of /CLUSTER with SYSMAN DO
 command, (S) *Sys Mgr Tuning*, 20-21; (S)
 Sys Mgmt Util M-Z, 6-31
- SET RADIX command, (P) *Debugger*, 8-10, 13-8
- SET RESTART_VALUE command, (G) *DCL N-Z*,
 DCLII-204 to DCLII-205
- SET RIGHTS_LIST command, (G) *DCL N-Z*,
 DCLII-206 to DCLII-208
 attributes, (G) *DCL N-Z*, DCLII-206
- SET RMS command, (P) *Alpha SDA*, SDA-75;
 (P) *VAX SDA*, SDA-80
- SET RMS_DEFAULT command, (G) *DCL N-Z*,
 DCLII-209 to DCLII-212; (P) *RMS Ref*, 6-7;
 (P) *File Appl*, 3-15
- /BUFFER_COUNT qualifier, (P) *File Appl*,
 3-11, 3-14, 3-16, 7-17, 7-18, 7-19
- /EXTEND_QUANTITY qualifier, (P) *File Appl*,
 9-7
- /INDEXED qualifier, (P) *File Appl*, 7-19
- /RELATIVE/BUFFER_COUNT qualifier, (P)
 File Appl, 3-17
- /RELATIVE qualifier, (P) *File Appl*, 7-18
- /SEQUENTIAL qualifier, (P) *File Appl*, 7-17
 to limit default extension quantity, (P) *RMS*
 Ref, 4-7
- SET SCOPE command, (P) *Debugger*, 9-10, 10-4,
 11-6, 11-10, 11-11
- SET SCREEN command
 in Show Cluster utility, (S) *Sys Mgmt Util*
 M-Z, 4-54
- SET SEARCH command, (P) *Debugger*, 10-6
- SET SECURITY command
 /ACL qualifier, (G) *User*, 19-6; (S) *Security*,
 4-21
 adding Identifier ACEs, (S) *Security*, 4-17
 deleting, (S) *Security*, 4-22
 deleting ACEs, (S) *Security*, 4-22
 replacing ACEs, (S) *Security*, 4-22
 /AFTER qualifier, (S) *Security*, 4-22
 changing object security profile, (G) *User*, 19-3;
 (S) *Security*, 4-9
 changing protection codes, (S) *Security*, 4-26
 /CLASS qualifier, (S) *Security*, 4-9, 4-18
 copying ACLs, (S) *Security*, 4-23
 /COPY_ATTRIBUTE qualifier, (S) *Security*,
 4-23
 /DEFAULT qualifier, (S) *Security*, 4-23
 /DELETE qualifier, (S) *Security*, 4-22
 deleting ACEs, (S) *Security*, 4-22
 for queues, (S) *Sys Mgr Essentials*, 13-23
 /LIKE qualifier, (S) *Security*, 4-23
 managing site defaults, (S) *Security*, 8-22
 modifying file characteristics, (S) *Sys Mgr*
 Essentials, 9-9
 /OWNER qualifier, (S) *Security*, 4-9
 /PROTECTION qualifier, (G) *User*, 19-3, 19-6;
 (S) *Security*, 4-9, 4-25
- SET SECURITY command
 /PROTECTION qualifier (cont'd)
 modifying codes, (S) *Security*, 4-26
 modifying for devices, (S) *Security*, 8-31
 /REPLACE qualifier, (S) *Security*, 4-22
- SET SECURITY/PROTECTION command, (S)
 Sys Mgr Essentials, 9-9
 changing directory protection, (S) *Sys Mgr*
 Essentials, 9-12
 setting default protection, (S) *Sys Mgr*
 Essentials, 9-8
- SET SERVICE command
 in LATCP, (S) *Sys Mgmt Util A-L*, 13-39
- SET SOURCE command, (P) *Debugger*, 10-2
- SET/STARTUP command
 in conversational boot, (S) *Sys Mgr Essentials*,
 4-12
 in SYSGEN, (S) *Sys Mgmt Util M-Z*, 5-17
- SET STEP command, (P) *Debugger*, 7-2, 8-19,
 10-7, 15-3
- SET SYMBOL command, (G) *User*, 14-28; (G)
 DCL N-Z, DCLII-213 to DCLII-215
 verb string translation, (G) *User*, 14-28
- Set system failure exception mode
 See SYS\$SET\$SFM system service
- SET TASK command, (P) *Debugger*, 16-11, 16-23
- SET TERMINAL command, (G) *User*, 3-16;
 (G) *DCL N-Z*, DCLII-216 to DCLII-228; (G)
 Compatibility, A-2; (S) *Sys Mgr Essentials*,
 7-9, 13-14; (P) *Debugger*, 11-22; (P) *I/O*
 User, 5-4, 5-19, 5-26
- /APPLICATION_KEYPAD qualifier, (G) *User*,
 3-17
- /BROADCAST qualifier, (G) *User*, 2-21
- despooling a printer, (S) *Sys Mgr Essentials*,
 7-15
- determining characteristics of a LAT line, (S)
 Sys Mgr Essentials, 7-12
- enabling virtual terminals, (S) *Sys Mgr*
 Essentials, 7-11
- in network operations, (S) *DECnet Intro*, 3-20,
 3-25
- /INSERT qualifier, (G) *User*, 3-16
- in system startup, (S) *Sys Mgr Essentials*,
 5-12, 7-10, 7-13
- /LINE_EDIT qualifier, (G) *User*, 3-16
- /NONUMERIC qualifier, (G) *User*, 3-17
- /OVERSTRIKE qualifier, (G) *User*, 3-16
- setting printer characteristics, (S) *Sys Mgr*
 Essentials, 7-13
- using over the network, (S) *Security*, 12-15
- /WRAP qualifier, (G) *User*, 3-17
- SET TIME command, (G) *DCL N-Z*, DCLII-229
 to DCLII-230
 setting time across a cluster, (S) *VMScluster*
 Sys, 5-20

- SET TIMEOUT command, (S) *Sys Mgr Essentials*, 2-18; (S) *Sys Mgmt Util M-Z*, 6-55
in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-55
- Setting broadcast intervals, (S) *DECams*, 1-10
- Setting characteristics
magnetic tape, (P) *I/O User*, 3-19
terminal, (P) *I/O User*, 5-40
- Setting system parameters
recommended method, (S) *Sys Mgmt Util A-L*, 6-3
- Setting up printers, (S) *Sys Mgr Essentials*, 13-14
- Setting up terminals, (S) *Sys Mgr Essentials*, 13-14
- SET TRACE command, (P) *Debugger*, 7-5, 10-7, 13-10, 15-3, 16-25, 16-28
- SET TYPE command, (P) *Debugger*, 8-25
- SET TYPE/OVERRIDE command, (P) *Debugger*, 8-26
- SET UIC command, (G) *DCL N-Z*, DCLII-231
See also Protection
- Set-Up key, (G) *User*, 2-25; (S) *Security*, 3-20
- Setup module, (S) *Sys Mgr Essentials*, 13-44
See also Device control modules
specifying in forms, (S) *Sys Mgr Essentials*, 13-42
- Setup tasks, (S) *Comparison*, 2-1
differences on Alpha and VAX systems, (S) *Comparison*, 2-5
AUTOGEN, (S) *Comparison*, 2-26
CONSCOPY.COM not available on Alpha systems, (S) *Comparison*, 2-12
devices, (S) *Comparison*, 2-22
DSA device naming, (S) *Comparison*, 2-23
file name format of drivers supplied by Digital, (S) *Comparison*, 2-24
I/O subsystem configuration commands in SYSMAN utility on Alpha systems, (S) *Comparison*, 2-15
improving the performance of images, (S) *Comparison*, 2-26
installation media, (S) *Comparison*, 2-24
new and changed parameters, (S) *Comparison*, 2-15
startup command procedures, (S) *Comparison*, 2-22
SYSMAN utility, (S) *Comparison*, 2-16
Terminal Fallback Facility, (S) *Comparison*, 2-28
VMSINSTAL utility, (S) *Comparison*, 2-24
similarities on Alpha and VAX systems, (S) *Comparison*, 2-1 to 2-5
.EXE executable file type, (S) *Comparison*, 2-7
.OBJ object file type, (S) *Comparison*, 2-7
- SET VECTOR_MODE command, (P) *Debugger*, 15-19
- SET VERIFY command, (G) *User*, 18-14; (G) *DCL N-Z*, DCLII-232 to DCLII-234
- SET VOLUME command, (G) *DCL N-Z*, DCLII-235 to DCLII-238
changing protection code, (S) *Sys Mgr Essentials*, 8-18
disabling high-water marking, (S) *Sys Mgr Tuning*, 16-7
encoding labels on volumes, (S) *Sys Mgr Essentials*, 8-29
/ERASE_ON_DELETE qualifier, (S) *Security*, 5-12
modifying disk volume characteristics, (S) *Sys Mgr Essentials*, 8-29
modifying file characteristics, (S) *Sys Mgr Essentials*, 9-8
performing data checks, (S) *Sys Mgr Essentials*, 8-29
specifying file retention periods, (S) *Sys Mgr Essentials*, 8-54
- SET WATCH command, (P) *Debugger*, 7-11, 10-7, 15-3
- SET WINDOW command, (P) *Debugger*, 11-14
- SET WORKING_SET command, (G) *DCL N-Z*, DCLII-239, DCLII-240
/QUOTA qualifier
specifying Alpha pagelet values, (S) *Comparison*, 5-10
- /SET_STATE qualifier, (P) *Debugger*, 12-9; (P) *Alpha SDA*, SDA-43; (P) *VAX SDA*, SDA-50
- Severity codes, (P) *Calling Std*, 6-3
handling, (P) *Calling Std*, 6-4
in completion status code field, (P) *RMS Ref*, 2-5
interpreting, (P) *Calling Std*, 6-4
meanings, (P) *Calling Std*, 6-4
symbols, (P) *Calling Std*, 6-4
- .SEVERITY directive, (P) *Concepts*, 13-59
- \$SEVERITY global symbol, (G) *DCL N-Z*, DCLII-175
changing, (G) *DCL A-M*, DCLII-222; (G) *DCL N-Z*, DCLII-51
- SEVMS (Security Enhancement Service software), (G) *SW Overview*, 3-14
- S field in symbolic offset
for specifying field length, (P) *RMS Ref*, 2-3
- SFSBs (shared file synchronization blocks), (P) *Alpha SDA*, SDA-76; (P) *VAX SDA*, SDA-81
- SSEC Ethernet device, (S) *DECnet Mgmt*, 2-10
- Shadowed disks
See Volume shadowing
- Shadowing
support for, (G) *V6.2 New Feat*, 7-4

- SHADOWING system parameter, (G) *V6.2 New Feat*, 3-15
- /SHADOW qualifier
 - in Mount utility, (S) *Sys Mgmt Util M-Z*, 2-34
- Shadow set members
 - inaccessibility because of failures, (S) *Dependable*, 8-21
- Shadow sets, (G) *SW Overview*, 2-12, 3-19
 - accessed through MSCP server, (S) *VMScluster Sys*, 6-24f
 - backing up, (S) *Sys Mgr Essentials*, 10-40
 - definition, (S) *VMScluster Sys*, 6-22
 - displaying SDA information, (P) *Alpha SDA*, SDA-95; (P) *VAX SDA*, SDA-106
 - distributing, (S) *VMScluster Sys*, 6-23
 - dump file failover, (G) *Compatibility*, 1-8
 - increased numbers supported, (G) *V6.2 New Feat*, 3-5
 - maximum number of sets, (S) *VMScluster Sys*, 6-25
 - mounting disks, (S) *Sys Mgr Essentials*, 10-42
 - overview, (S) *VMScluster Sys*, 6-22
 - quorum disk restriction, (S) *VMScluster Sys*, 6-23
 - restoring, (S) *Sys Mgr Essentials*, 10-47
- Shadow set virtual unit driver, (P) *I/O User*, 7-1
 - functions, (P) *I/O User*, 7-2
 - hardware configurations, (P) *I/O User*, 7-2
- Shareable address data section, (P) *Alpha SDA*, SDA-58
- Shareable image libraries, (P) *Environment*, 8-4
- Shareable images, (S) *Sys Mgr Tuning*, 16-11; (P) *Concepts*, 17-3
 - See also Modules
 - activating, (P) *Linker*, LINK-52
 - analyzing, (G) *DCL A-M*, DCLI-21
 - as linker input files, (P) *Linker*, 1-6
 - assigning logical names for, (S) *Sys Mgr Tuning*, 16-17
 - benefits of, (P) *Linker*, 1-6
 - CANCEL IMAGE command, (P) *Debugger*, 9-13
 - creating, (P) *Linker*, 1-13, 4-1, LINK-30
 - creating a based shareable image, (P) *Linker*, 4-7
 - creating a run-time kit, (P) *Linker*, 4-10, LINK-15
 - creating resident shareable images, (P) *Linker*, 1-16
 - debugging, (P) *Linker*, LINK-9; (P) *Debugger*, 9-11
 - declaring alias names for universal symbols, (P) *Linker*, 4-11
 - declaring universal symbols on Alpha systems, (P) *Linker*, LINK-65
 - declaring universal symbols on VAX systems, (P) *Linker*, 4-2
 - default base address, (P) *Linker*, LINK-43
 - Shareable images (cont'd)
 - definition, (P) *Linker*, 1-1
 - enhancing performance of, (P) *Linker*, 1-16
 - ensuring upward compatibility, (P) *Linker*, LINK-53
 - deleting universal symbols, (P) *Linker*, 4-10
 - guidelines, (P) *Linker*, 4-6
 - on Alpha systems, (P) *Linker*, 4-9
 - on VAX systems, (P) *Linker*, 4-4
 - file analyzing, (G) *DCL A-M*, DCLI-21
 - implicit processing of, (P) *Linker*, 2-11
 - improving the performance of, (P) *Linker*, 4-11
 - in libraries, (P) *Linker*, 1-8
 - default location, (P) *Linker*, 1-9
 - specifying as linker input, (P) *Linker*, LINK-17, LINK-19
 - installing, (S) *Alpha Perform*, 4-2, 6-18; (P) *Linker*, 1-7, 1-8
 - naming, (P) *Linker*, LINK-30
 - privileged, (P) *Concepts*, 18-1; (P) *Linker*, 4-11
 - protecting, (P) *Linker*, LINK-24, LINK-59
 - resident images
 - effect on image map file, (P) *Linker*, 5-5
 - SET BREAK/INTO command, (P) *Debugger*, 7-9
 - SET IMAGE command, (P) *Debugger*, 9-14
 - SET STEP INTO command, (P) *Debugger*, 7-4
 - SET TRACE/INTO command, (P) *Debugger*, 7-9
 - SET WATCH command, (P) *Debugger*, 7-16
 - SHOW IMAGE command, (P) *Debugger*, 9-13
 - specifying as linker input, (P) *Linker*, 1-7, LINK-30
 - in libraries, (P) *Linker*, LINK-19
 - specifying identification numbers, (P) *Linker*, LINK-52
 - symbol vector program section, (P) *Linker*, 3-3
 - updating, (P) *Modular Proc*, 6-5
 - use of GSMATCH= option, (P) *Linker*, LINK-53
- Shareable linkage sections, (S) *Sys Mgr Tuning*, 16-13
- /SHAREABLE qualifier, (P) *Linker*, LINK-30; (P) *Debugger*, 9-11
 - creating shareable images, (P) *Linker*, 4-1
- Shareable volumes
 - initializing disk as, (G) *DCL A-M*, DCLI-255
- SHARE command
 - in SYSGEN, (S) *Sys Mgmt Util M-Z*, 5-17
- Shared access, (P) *File Appl*, 3-3
 - requirement to specify, (P) *RMS Ref*, 3-1, A-12
- Shared command procedure files, (S) *VMScluster Sys*, 5-8
- Shared data
 - providing dependability, (S) *Dependable*, 8-58

- Shared disk and tape resources, (S) *VMScluster Sys*, 1-3
 - in VMScluster environments, (S) *VMScluster Sys*, 1-3
- Shared disk volumes, (S) *VMScluster Sys*, 6-19
 - mounting, (S) *VMScluster Sys*, 6-19
- Shared files
 - See also File sharing
 - clusterwide coordination, (S) *VMScluster Sys*, 5-17
 - end-of-file positioning, (P) *RMS Ref*, RMS-7
 - NETPROXY.DAT file, (S) *VMScluster Sys*, 5-17
 - SYSUAF.DAT file, (S) *VMScluster Sys*, 5-17
- Shared file synchronization blocks
 - See SFSBs
- Shared memory, (P) *DECthreads*, 3-6
- Shared processing and printer resources, (S) *VMScluster Sys*, 5-1
- Shared queues, (S) *VMScluster Sys*, 7-1
- Shared resources
 - making DECnet databases available
 - clusterwide, (S) *VMScluster Sys*, 4-8
 - SYSTARTUP.COM procedure, (S) *VMScluster Sys*, 5-8
- Shared sequential file operations
 - establishing global buffer size, (P) *RMS Ref*, 4-19, 6-7; (P) *File Appl*, 3-15, 7-21
- SHARE/INITIALIZE command
 - in SYSGEN, (S) *Sys Mgmt Util M-Z*, 5-18
- SHARE privilege, (S) *Security*, A-15
- /SHARE qualifier, (P) *Debugger*, 7-9, 9-15
 - in Mount utility, (S) *Sys Mgmt Util M-Z*, 2-35
- Sharing data
 - RMS shared files, (P) *Concepts*, 17-12
- SHDRIVER.EXE file, (P) *I/O User*, 7-1
- Sheet-feed paper
 - specifying in forms, (S) *Sys Mgr Essentials*, 13-42
- Shelving
 - controlling whether file is shelvable, (G) *DCL N-Z*, DCLII-147; (P) *RMS Ref*, 10-8
 - determining if file is shelvable, (G) *DCL A-M*, DCLI-168, DCLI-320; (P) *RMS Ref*, 10-9; (P) *I/O User*, 1-18
 - determining if file is shelved, (G) *DCL A-M*, DCLI-168, DCLI-169, DCLI-320; (P) *RMS Ref*, 10-9; (P) *I/O User*, 1-18
- Shifting operator (@), (P) *VAX SDA*, SDA-17
- Shift restrictions, (G) *User*, 2-12; (S) *Security*, 3-8
- SHMEM privilege, (S) *Security*, A-16
- SHOW ABORT_KEY command, (P) *Debugger*, 5-11
- SHOW ACCOUNTING command, (G) *DCL N-Z*, DCLII-244, DCLII-245; (S) *Sys Mgr Tuning*, 19-2
- SHOW ACL command, (G) *DCL N-Z*, DCLII-246 to DCLII-247; (S) *Sys Mgr Tuning*, 26-8
- SHOW/ADAPTER command
 - in SYSGEN, (S) *Sys Mgmt Util M-Z*, 5-23
- SHOW AREA command, (S) *DECnet Mgmt Util*, 3-118
- SHOW AST command, (P) *Debugger*, 13-16
- SHOW ATSIGN command, (P) *Debugger*, 12-2
- SHOW AUDIT command, (G) *DCL N-Z*, DCLII-248 to DCLII-250; (S) *Security*, 9-3, 9-24
 - to display event classes being audited, (S) *Sys Mgr Tuning*, 18-27
- SHOW BREAK command, (P) *Debugger*, 7-5
- SHOW BROADCAST command, (G) *DCL N-Z*, DCLII-251, DCLII-252
- SHOW/BUS command
 - in SYSGEN, (S) *Sys Mgmt Util M-Z*, 5-24
- SHOW CALLS command, (P) *Debugger*, 5-13, 6-7, 13-11
- SHOW CALL_FRAME command, (P) *Alpha SDA*, SDA-78; (P) *VAX SDA*, SDA-69, SDA-83
- SHOW CIRCUIT command, (S) *DECnet Mgmt Util*, 3-120
- SHOW CLUSTER (Show Cluster utility)
 - See Show Cluster utility
- SHOW CLUSTER command, (G) *DCL N-Z*, DCLII-253; (P) *Alpha SDA*, SDA-80; (P) *VAX SDA*, SDA-86
 - in Show Cluster utility, (S) *Sys Mgmt Util M-Z*, 4-5
- Show Cluster utility (SHOW CLUSTER), (S) *VMScluster Sys*, 1-10, 10-21
 - activation time, (S) *Sys Mgmt Util M-Z*, 4-6, 4-7, 4-8, 4-54
 - classes of data, (S) *Sys Mgmt Util M-Z*, 4-3
 - CL_QUORUM command, (S) *VMScluster Sys*, 10-22
 - CL_VOTES command, (S) *VMScluster Sys*, 10-22
 - commands, (S) *Sys Mgmt Util M-Z*, 4-9, 4-11
 - continuous mode, (S) *Sys Mgmt Util M-Z*, 4-5, 4-7
 - controlling displays, (S) *Sys Mgr Tuning*, 20-5, 20-10; (S) *Sys Mgmt Util M-Z*, 4-4
 - data fields, (S) *Sys Mgmt Util M-Z*, 4-3
 - DCL qualifiers, (S) *Sys Mgmt Util M-Z*, 4-6, 4-8
 - defining arrow keys, (S) *Sys Mgmt Util M-Z*, B-3
 - defining keypad keys, (S) *Sys Mgr Tuning*, 20-7; (S) *Sys Mgmt Util M-Z*, 4-33, B-3
 - deselecting window, (S) *Sys Mgmt Util M-Z*, 4-35

Show Cluster utility (SHOW CLUSTER) (cont'd)

- directing output, (S) *Sys Mgmt Util M-Z*, 4-5
- display formatting, (S) *Sys Mgmt Util M-Z*, 4-4
- Execute Procedure (@) command, (S) *Sys Mgmt Util M-Z*, 4-11
- exiting, (S) *Sys Mgmt Util M-Z*, 4-5, 4-35
- EXPECTED_VOTES command, (S) *VMScluster Sys*, 10-22
- invoking, (S) *Sys Mgmt Util M-Z*, 4-5
- keypad, (S) *Sys Mgmt Util M-Z*, B-1
- moving display window, (S) *Sys Mgmt Util M-Z*, 4-37, 4-50
- panning display window, (S) *Sys Mgmt Util M-Z*, 4-39
- qualifiers, (S) *Sys Mgmt Util M-Z*, 4-6
- refreshing the display, (S) *Sys Mgmt Util M-Z*, 4-40
- refreshing the screen, (S) *Sys Mgr Tuning*, 20-10
- removing display information, (S) *Sys Mgmt Util M-Z*, 4-40 to 4-46
- reports, (S) *Sys Mgr Tuning*, 20-4; (S) *Sys Mgmt Util M-Z*, 4-3
 - controlling displays, (S) *Sys Mgr Tuning*, 20-10
 - formatting, (S) *Sys Mgr Tuning*, 20-5, 20-11, 20-14
 - initialization file, (S) *Sys Mgr Tuning*, 20-10
- resetting display information, (S) *Sys Mgmt Util M-Z*, 4-37
- sample display, (S) *Sys Mgmt Util M-Z*, 4-3
- scrolling display window, (S) *Sys Mgmt Util M-Z*, 4-39, 4-50
- selecting display fields, (S) *Sys Mgmt Util M-Z*, 4-19
 - CIRCUITS class, (S) *Sys Mgmt Util M-Z*, 4-11
 - CLUSTER class, (S) *Sys Mgmt Util M-Z*, 4-13
 - CONNECTIONS class, (S) *Sys Mgmt Util M-Z*, 4-14
 - COUNTERS class, (S) *Sys Mgmt Util M-Z*, 4-15
 - CREDITS class, (S) *Sys Mgmt Util M-Z*, 4-17
 - ERRORS class, (S) *Sys Mgmt Util M-Z*, 4-18
 - LOCAL_PORTS class, (S) *Sys Mgmt Util M-Z*, 4-28
 - MEMBERS class, (S) *Sys Mgmt Util M-Z*, 4-30
 - SYSTEMS class, (S) *Sys Mgmt Util M-Z*, 4-31
- selecting display window, (S) *Sys Mgmt Util M-Z*, 4-50
- startup initialization files, (S) *Sys Mgr Tuning*, 20-5, 20-14; (S) *Sys Mgmt Util M-Z*, 4-4

Show Cluster utility (SHOW CLUSTER) (cont'd)

- using, (S) *Sys Mgr Tuning*, 20-4
- SHOW command, (G) *DCL N-Z*, DCLII-241 to DCLII-243; (S) *Sys Mgr Essentials*, 9-1; (S) *DECnet Intro*, 4-1; (S) *DECnet Mgmt*, 3-72
 - in CLUE, (S) *Sys Mgmt Util A-L*, 8-8
 - in conversational boot, (S) *Sys Mgr Essentials*, 4-6
 - in SYSGEN, (S) *Sys Mgr Tuning*, 14-31
 - specifying languages, (S) *Sys Mgr Essentials*, 5-43, 5-44
 - summary of options, (G) *DCL N-Z*, DCLII-241
 - time and date formats, (G) *V6.2 New Feat*, 3-19; (S) *Sys Mgr Essentials*, 5-42
 - to display network configuration database, (S) *DECnet Intro*, 3-34
- SHOW CONFIGURATION command
 - in LANCP utility, (S) *Sys Mgmt Util A-L*, 12-31
- SHOW/CONFIGURATION command
 - in SYSGEN, (S) *Sys Mgmt Util M-Z*, 5-24
- SHOW CONNECTIONS command, (P) *Alpha SDA*, SDA-84; (P) *VAX SDA*, SDA-91
- SHOW COUNTER command, (S) *DECnet Intro*, 4-3
- SHOW CPU command, (G) *DCL N-Z*, DCLII-254 to DCLII-258; (S) *Sys Mgr Tuning*, 26-3, 26-9; (P) *Alpha SDA*, SDA-11, SDA-68, SDA-86; (P) *VAX SDA*, SDA-14, SDA-72, SDA-95
 - analyzing a running system, (P) *Alpha SDA*, SDA-10; (P) *VAX SDA*, SDA-11
 - /FULL qualifier on Alpha systems, (S) *Comparison*, 2-18
- SHOW CRASH command, (P) *Alpha SDA*, SDA-11, SDA-19, SDA-68, SDA-89; (P) *VAX SDA*, SDA-14, SDA-19, SDA-21, SDA-72, SDA-99
 - analyzing a running system, (P) *Alpha SDA*, SDA-10; (P) *VAX SDA*, SDA-11
- SHOW DEFAULT command, (G) *User*, 5-6; (G) *DCL N-Z*, DCLII-259, DCLII-260
 - in Monitor utility, (S) *Sys Mgmt Util M-Z*, 1-61
- SHOW DEFINE command, (P) *Debugger*, 12-6
- SHOW DEVICE command, (P) *Alpha SDA*, SDA-19, SDA-93; (P) *VAX SDA*, SDA-20, SDA-27, SDA-104
 - in LANCP utility, (S) *Sys Mgmt Util A-L*, 12-32
- SHOW/DEVICE command
 - in SYSGEN, (S) *Sys Mgmt Util M-Z*, 5-27
- SHOW DEVICES command, (G) *User*, 12-2; (G) *DCL N-Z*, DCLII-261 to DCLII-267; (S) *Sys Mgr Essentials*, 7-2, 7-16, 9-5
- checking mounted volumes, (S) *Sys Mgr Essentials*, 8-37

SHOW DEVICES command (cont'd)

determining the status of files, (S) *Sys Mgr Essentials*, 8-44; (S) *Sys Mgr Tuning*, 16-18
examples, (S) *Sys Mgr Essentials*, 7-2
for ISO-9660 formatted devices, (S) *Sys Mgr Essentials*, 7-5
volume rebuild status, (S) *Sys Mgr Essentials*, 7-4

SHOW DEVICES/SERVED command, (G) *DCL N-Z*, DCLII-268 to DCLII-272

SHOW DISPLAY command, (G) *DCL N-Z*, DCLII-273, DCLII-274; (P) *Debugger*, 11-12

SHOW/DRIVER command
in SYSGEN, (S) *Sys Mgmt Util M-Z*, 5-28

SHOW EDITOR command, (P) *Environment*, 9-5; (P) *Debugger*, 5-4

SHOW ENTRY command, (G) *User*, 4-17, 18-10, 18-18; (G) *DCL N-Z*, DCLII-275 to DCLII-279; (S) *Sys Mgr Essentials*, 13-68

SHOW entry point, (P) *Modular Proc*, 4-8

SHOW ENVIRONMENT command, (S) *Sys Mgr Essentials*, 2-14; (S) *Sys Mgmt Util M-Z*, 6-53, 6-56
in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-56

SHOW ERROR command, (G) *DCL N-Z*, DCLII-280, DCLII-282

SHOW EVENT_FACILITY command, (P) *Debugger*, 7-10, 16-30

SHOW EXECUTIVE command, (P) *Alpha SDA*, SDA-97; (P) *VAX SDA*, SDA-20, SDA-111

SHOW EXECUTOR CHARACTERISTICS command
display of proxy access, (S) *DECnet Mgmt*, 3-71

SHOW EXECUTOR command, (S) *DECnet Mgmt*, 3-8; (S) *DECnet Mgmt Util*, 3-125
display of executor type, (S) *DECnet Mgmt*, 3-49

SHOW EXIT_HANDLERS command, (P) *Debugger*, 13-16

SHOW HEADER command, (P) *Alpha SDA*, SDA-99; (P) *VAX SDA*, SDA-113

SHOW IMAGE command, (P) *Debugger*, 9-13

Showing system parameters
with SYSGEN, (S) *Sys Mgr Tuning*, 14-31

SHOW INTRUSION command, (G) *V6.2 New Feat*, 3-18; (G) *DCL N-Z*, DCLII-283 to DCLII-285; (S) *Sys Mgr Essentials*, 11-7

SHOW KEY command, (G) *DCL N-Z*, DCLII-286, DCLII-287; (P) *Debugger*, 12-8
in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-57

SHOW LAN command, (P) *Alpha SDA*, SDA-101; (P) *VAX SDA*, SDA-114

SHOW LANGUAGE command, (P) *Debugger*, 8-10

SHOW LICENSE command, (G) *DCL N-Z*, DCLII-288 to DCLII-291

SHOW LINE command, (S) *DECnet Mgmt Util*, 3-128

Ethernet hardware address, (S) *DECnet Mgmt*, 3-46, 7-10

SHOW LINK command

in LATCP, (S) *Sys Mgmt Util A-L*, 13-41

SHOW LINKS command, (S) *DECnet Mgmt Util*, 3-131

SHOW LOCK command, (P) *Alpha SDA*, SDA-107; (P) *VAX SDA*, SDA-122

SHOW LOG command, (P) *Debugger*, 12-6

in LANCP utility, (S) *Sys Mgmt Util A-L*, 12-35

in LMCP, (S) *Sys Mgmt Util A-L*, 14-16

SHOW LOGGING command, (S) *DECnet Mgmt Util*, 3-133

to display network logging activity, (S) *DECnet Intro*, 4-6

SHOW LOGICAL command, (G) *User*, 13-20, 13-21; (G) *DCL N-Z*, DCLII-292 to DCLII-297

displaying access mode, (G) *User*, 13-21

displaying directory table structure, (G) *User*, 13-22

displaying logical name tables, (G) *User*, 13-21

displaying process permanent files, (G) *User*, 13-21

in network operations, (S) *DECnet Intro*, 3-2

to display name of local node, (S) *DECnet Intro*, 3-2

SHOW LOGS command, (P) *VAX SDA*, SDA-126

SHOW MACHINE_CHECK command, (P) *Alpha SDA*, SDA-11, SDA-110

SHOW MARGINS command, (P) *Debugger*, 10-8

SHOW MEMORY/CACHE command

using to observe cache statistics, (S) *Comparison*, 5-17

SHOW MEMORY/CACHE/FULL command

using to observe cache statistics, (S) *Comparison*, 5-17

SHOW MEMORY command, (G) *DCL N-Z*,

DCLII-298 to DCLII-307; (G) *Compatibility*, 1-5, A-2; (P) *Alpha SDA*, SDA-4; (P) *VAX SDA*, SDA-5

determining size of page and swap files, (S) *Sys Mgr Tuning*, 15-23

displaying page and swap files, (S) *Sys Mgr Tuning*, 15-6

displays Alpha CPU-specific page values, (S) *Comparison*, 5-7

/GH_REGIONS qualifier, (S) *Comparison*, 5-15
monitoring page file usage, (S) *Sys Mgr Tuning*, 15-6

monitoring swap file usage, (S) *Sys Mgr Tuning*, 15-10

- SHOW MEMORY command (cont'd)
 showing the size of nonpaged pool, (S) *Sys Mgr Tuning*, 26-7
- SHOW MODULE command, (P) *Debugger*, 9-6, 9-15
- SHOW MODULE CONFIGURATOR command,
 (S) *DECnet Intro*, 4-6; (S) *DECnet Mgmt*, 3-34, 3-35; (S) *DECnet Mgmt Util*, 3-136
- SHOW MODULE X25-ACCESS command, (S) *DECnet Mgmt Util*, 3-139
- SHOW MODULE X25-PROTOCOL command, (S) *DECnet Mgmt Util*, 3-141
- SHOW MODULE X25-SERVER command, (S) *DECnet Mgmt Util*, 3-145
- SHOW MODULE X29-SERVER command, (S) *DECnet Mgmt Util*, 3-145
- SHOW MOPDLL command
 in LANCP utility, (S) *Sys Mgmt Util A-L*, 12-37
- SHOW NETWORK command, (G) *DCL N-Z*, DCLII-308; (S) *DECnet Intro*, 3-4; (S) *DECnet Mgmt*, 8-1
 display of network status, (S) *DECnet Mgmt*, 8-1
 in network operations, (S) *DECnet Intro*, 2-2, 3-2
 to display name and address of local node, (S) *DECnet Intro*, 3-2
 to display routing information, (S) *DECnet Intro*, 3-2
- SHOW NODE command, (S) *DECnet Intro*, 3-34; (S) *DECnet Mgmt Util*, 3-147
 display of node type, (S) *DECnet Mgmt*, 3-49
 in LANCP utility, (S) *Sys Mgmt Util A-L*, 12-37
 in LATCP, (S) *Sys Mgmt Util A-L*, 13-46
- Show Nodes, (S) *DECamds*, 2-4
 changing default behavior, (S) *DECamds*, 5-2
- SHOW OBJECT command, (S) *DECnet Mgmt Util*, 3-152
- SHOW OUTPUT command, (P) *Debugger*, 12-2, 12-6
- SHOW PAGE_TABLE command, (P) *Alpha SDA*, SDA-112; (P) *VAX SDA*, SDA-26, SDA-127
- SHOW PFN_DATA command, (P) *Alpha SDA*, SDA-116; (P) *VAX SDA*, SDA-131
- SHOW POOL command, (P) *Alpha SDA*, SDA-120; (P) *VAX SDA*, SDA-134
- SHOW PORT command
 in LATCP, (S) *Sys Mgmt Util A-L*, 13-52
- SHOW PORTS command, (P) *Alpha SDA*, SDA-124; (P) *VAX SDA*, SDA-141
- SHOW PRINTER command, (G) *DCL N-Z*, DCLII-309, DCLII-310
- SHOW PROCESS/ALL command, (P) *Alpha SDA*, SDA-129; (P) *VAX SDA*, SDA-151
- SHOW PROCESS command, (G) *DCL N-Z*, DCLII-311 to DCLII-318; (S) *Sys Mgr Essentials*, 9-5; (S) *Sys Mgr Tuning*, 26-9; (P) *Debugger*, 14-3, 15-2; (P) *Alpha SDA*, SDA-73, SDA-127; (P) *VAX SDA*, SDA-78, SDA-148
 /ALL qualifier, (G) *User*, 18-1
 displays Alpha pagelet values, (S) *Comparison*, 5-9
 /CONTINUOUS qualifier
 displays CPU-specific page values, (S) *Comparison*, 5-9
- SHOW PROCESS/LOCKS command, (P) *Alpha SDA*, SDA-107; (P) *VAX SDA*, SDA-122
- SHOW PROCESS/PRIVILEGES command, (S) *DECnet Intro*, 3-7
 in network operations, (S) *DECnet Intro*, 3-1
- SHOW PROCESS/RMS command, (P) *Alpha SDA*, SDA-143; (P) *VAX SDA*, SDA-165
 selecting display options, (P) *Alpha SDA*, SDA-76; (P) *VAX SDA*, SDA-81
- SHOW PROFILE command, (S) *Sys Mgmt Util M-Z*, 6-58
 in SYSMAN, (S) *Sys Mgr Essentials*, 2-17; (S) *Sys Mgmt Util M-Z*, 6-58
- SHOW PROTECTION command, (G) *DCL N-Z*, DCLII-319; (S) *Sys Mgr Essentials*, 9-5
- SHOW QUEUE/CHARACTERISTICS command,
 (G) *DCL N-Z*, DCLII-327, DCLII-328
- SHOW QUEUE command, (G) *User*, 4-17, 18-18; (G) *DCL N-Z*, DCLII-320 to DCLII-326; (S) *Sys Mgr Essentials*, 13-26
 comparison on Alpha and VAX systems, (S) *Comparison*, 3-6
 /FULL qualifier, (G) *User*, 18-13
- SHOW QUEUE/FORM command, (G) *DCL N-Z*, DCLII-329, DCLII-330
- SHOW QUEUE/MANAGER command, (S) *Sys Mgr Essentials*, 12-11
- SHOW QUEUE_ENTRY command
 in LATCP, (S) *Sys Mgmt Util A-L*, 13-55
- SHOW QUOTA command, (G) *DCL N-Z*, DCLII-331; (S) *Sys Mgr Essentials*, 8-52
- SHOW RADIX command, (P) *Debugger*, 8-10
- SHOW RESOURCE command, (P) *Alpha SDA*, SDA-107, SDA-139; (P) *VAX SDA*, SDA-122, SDA-160
- SHOW RMS command, (P) *Alpha SDA*, SDA-143; (P) *VAX SDA*, SDA-165
- SHOW RMS_DEFAULT command, (G) *DCL N-Z*, DCLII-332; (P) *Rec Mgmt Util*, 2-14, 4-29; (P) *File Appl*, 3-11, 3-17
 current default extension size, (P) *File Appl*, 9-7
 current process-default buffer count, (P) *File Appl*, 7-17 to 7-19

- SHOW RSPID command, (P) *Alpha SDA*, SDA-144; (P) *VAX SDA*, SDA-166
- SHOW SCOPE command, (P) *Debugger*, 9-11
- SHOW SEARCH command, (P) *Debugger*, 10-7
- SHOW SECURITY command, (S) *Security*, 4-20
displaying security profiles of objects, (G) *User*, 19-3; (S) *Security*, 4-9
displaying site defaults, (S) *Security*, 8-22, 8-23
displaying the object's class, (S) *Security*, 4-9
for queues, (S) *Sys Mgr Essentials*, 13-23
- SHOW SELECT command, (P) *Debugger*, 11-21
- SHOW SERVICE command
in LATCP, (S) *Sys Mgmt Util A-L*, 13-57
- SHOW SNAPSHOT command, (P) *VAX SDA*, SDA-168
- Show software products, (S) *Sys Mgr Essentials*, 3-35
- SHOW SOURCE command, (P) *Debugger*, 10-2
- SHOW SPINLOCKS command, (P) *Alpha SDA*, SDA-147; (P) *VAX SDA*, SDA-171
- SHOW STACK command, (P) *Debugger*, 13-12; (P) *Alpha SDA*, SDA-151; (P) *VAX SDA*, SDA-25, SDA-177
- SHOW/STARTUP command, (S) *Sys Mgmt Util M-Z*, 5-29
in conversational boot, (S) *Sys Mgr Essentials*, 4-12
- SHOW STATUS command, (G) *DCL N-Z*, DCLII-333
- SHOW STEP command, (P) *Debugger*, 7-3
- SHOW SUMMARY command, (P) *Alpha SDA*, SDA-127, SDA-155; (P) *VAX SDA*, SDA-148, SDA-179
- SHOW SYMBOL command, (G) *User*, 14-6; (G) *DCL N-Z*, DCLII-334, DCLII-335; (P) *Debugger*, 9-8, 16-28; (P) *Alpha SDA*, SDA-157; (P) *VAX SDA*, SDA-181
- SHOW SYMBOL/DEFINED command, (P) *Debugger*, 12-6
- SHOW SYSTEM command, (G) *DCL N-Z*, DCLII-336 to DCLII-343
/FULL on Alpha displays CPU-specific page values and kilobyte values, (S) *Comparison*, 5-8
- SHOW TASK command, (P) *Debugger*, 16-13, 16-16
- SHOW TERMINAL command, (G) *User*, 3-16; (G) *DCL N-Z*, DCLII-344, DCLII-346; (P) *Debugger*, 11-23
- SHOW TIME command, (G) *DCL N-Z*, DCLII-347
in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-58
- SHOW TIMEOUT command, (S) *Sys Mgmt Util M-Z*, 6-58
- SHOW TRACE command, (P) *Debugger*, 7-5
- SHOW TRANSACTIONS command, (P) *VAX SDA*, SDA-182
- SHOW TRANSLATION command, (G) *DCL N-Z*, DCLII-348, DCLII-349
- SHOW/TURBOCHANNEL command
in SYSGEN, (S) *Sys Mgmt Util M-Z*, 5-29
- SHOW TYPE command, (P) *Debugger*, 8-26
- SHOW/UNIBUS command
in SYSGEN, (S) *Sys Mgmt Util M-Z*, 5-30
- SHOW USERS command, (G) *DCL N-Z*, DCLII-350 to DCLII-354
- SHOW VECTOR_MODE command, (P) *Debugger*, 15-19
- SHOW WATCH command, (P) *Debugger*, 7-13
- SHOW WINDOW command, (P) *Debugger*, 11-15
- SHOW WORKING_SET command, (G) *DCL N-Z*, DCLII-355 to DCLII-356
displays Alpha pagelet and page values, (S) *Comparison*, 5-10
- SHOW ZONE command, (G) *DCL N-Z*, DCLII-357
- SHOW [parameter] command
in SYSGEN, (S) *Sys Mgmt Util M-Z*, 5-20
- SHOW_CLUSTER\$INIT, (S) *Sys Mgmt Util M-Z*, 4-11
- SHOW_CLUSTER\$INIT.COM command
procedure, (S) *Sys Mgr Tuning*, 20-14
- SHOW_CLUSTER\$INIT logical name, (S) *Sys Mgr Tuning*, 20-14
- Shutdown
See System shutdown
- SHUTDOWN\$DECNET_MINUTES logical, (G) *V6.2 New Feat*, 3-22
- SHUTDOWN\$DECNET_MINUTES logical name, (S) *Sys Mgr Essentials*, 4-33
- SHUTDOWN\$DISABLE_AUTOSTART logical name, (S) *Sys Mgr Essentials*, 4-33, 13-56
- SHUTDOWN\$INFORM_NODES logical name, (S) *Sys Mgr Essentials*, 4-33
- SHUTDOWN\$MINIMUM_MINUTES logical name, (S) *Sys Mgr Essentials*, 4-33
- SHUTDOWN\$QUEUE_MINUTES logical, (G) *V6.2 New Feat*, 3-22
- SHUTDOWN\$QUEUE_MINUTES logical name, (S) *Sys Mgr Essentials*, 4-33
- SHUTDOWN\$TIME logical name, (S) *Sys Mgr Essentials*, 4-33
- SHUTDOWN\$VERBOSE logical name, (S) *Sys Mgr Essentials*, 4-33
- SHUTDOWN.COM
logicals, (G) *V6.2 New Feat*, 3-22
- SHUTDOWN.COM command procedure, (S) *Sys Mgr Essentials*, 4-27
- See also System shutdown
customizing, (S) *Sys Mgr Essentials*, 4-32, 4-33

SHUTDOWN.COM command procedure (cont'd)

defining time before shutdown, (S) *Sys Mgr Essentials*, 4-33

example, (S) *Sys Mgr Essentials*, 4-30

executing with SYSMAN, (S) *Sys Mgr Essentials*, 4-34

reboot options, (S) *Sys Mgr Essentials*, 4-29

required privileges, (S) *Sys Mgr Essentials*, 4-27

SHUTDOWN command

shutting down a node or subset of nodes, (S) *VMScluster Sys*, 8-38

shutting down the cluster, (S) *VMScluster Sys*, 8-38

SHUTDOWN NODE command

in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-59

SHUTDOWN phase of AUTOGEN, (S) *Sys Mgmt Util A-L*, 6-8

Shutdown procedure, node, (S) *DECamds*, A-13

Shutting down a node, (S) *VMScluster Sys*, 8-38

Shutting down the cluster, (S) *VMScluster Sys*, 8-38, 10-22

SIDR (secondary index data record), (P) *Rec Mgmt Util*, 1-6, 4-5; (P) *File Appl*, 3-18, 3-22, 10-21

for storing sorted pointers, (P) *Rec Mgmt Util*, 2-9

SID register

displaying, (P) *VAX SDA*, SDA-96

Signal argument vectors, (P) *Concepts*, 13-28, 13-32, 13-63; (P) *Calling Std*, 6-12

Signal array, (P) *Alpha SDA*, SDA-21; (P) *VAX SDA*, SDA-22

Signaler's register, (P) *Calling Std*, 6-20

Signal filter, (S) *DECamds*, 2-7

Signal handlers

installing for UNIX signals, (P) *DECthreads*, A-6

Signaling, (P) *Concepts*, 13-32

changing to return status, (P) *Concepts*, 13-71

Signaling and condition handling, (P) *Modular Proc*, 2-20

Signaling a wake-up, (P) *DECthreads*, pthread-30, pthread-31, cma-33, cma-34

Signaling conditions, (P) *Calling Std*, 6-9

with GENTRAP, (P) *Calling Std*, 6-9

with LIB\$SIGNAL, (P) *Calling Std*, 6-9

Signaling error conditions, (P) *Modular Proc*, 2-20

Signaling errors

example in a VAX MACRO program, (P) *File Appl*, 5-12

Signals

alternatives to using, (P) *DECthreads*, A-7

arithmetic error, (P) *DECthreads*, A-8

asynchronous, (P) *DECthreads*, A-6, A-8

illegal instruction, (P) *DECthreads*, A-9

nonterminating, (P) *DECthreads*, A-5

Signals (cont'd)

reasons to avoid in a multithreaded program, (P) *DECthreads*, A-7

reported as exceptions, (P) *DECthreads*, A-8

synchronous, (P) *DECthreads*, A-6

terminating, (P) *DECthreads*, A-5, A-8

types of, (P) *DECthreads*, A-5

Signature information, (P) *Calling Std*, 3-22

Sign-extended longword fields, (P) *LIB\$, LIB*-150

Sign representation

preference for key type coding, (P) *RMS Ref*, 12-6

SII integral adapter, (P) *I/O User*, 2-3

/SILENT qualifier, (P) *Debugger*, 7-9, 16-33

Simple keys, (P) *RMS Ref*, 12-12

Simple Mail Transfer Protocol

See SMTP

Simple names

converting to opaque, (P) *Sys Svc I*, SYS1-230

Simple Network Management Protocol

See SNMP

Simple procedure, (P) *Calling Std*, 3-43

/SINCE qualifier

in Backup utility, (S) *Sys Mgmt Util A-L*, 7-60

sincosd routine, (P) *Portable Math*, DPML-53, B-12

sincos routine, (P) *Portable Math*, DPML-53, B-12

sind routine, (P) *Portable Math*, DPML-52, B-12

Sine

hyperbolic, (P) *MTH\$, MTH*-101, MTH-133

in degrees, (P) *MTH\$, MTH*-99, MTH-128, MTH-131

in radians, (P) *MTH\$, MTH*-98, MTH-123, MTH-125

of complex number, (P) *MTH\$, MTH*-52, MTH-53

Single-ended signaling

for SCSI, (G) *V6.2 New Feat*, 7-7

Single instruction access, (P) *Modular Proc*, 3-17

Single Lock Summary window, (S) *DECamds*, 3-18 to 3-19

error messages, (S) *DECamds*, 3-19

Granted, Conversion, and Waiting Queue Lock, (S) *DECamds*, 3-19

Granted Lock, (S) *DECamds*, 3-19

Single node

collecting data, (S) *DECamds*, 2-5

Single points of failure

in configurations, (S) *Dependable*, 6-1

in networks, (S) *Dependable*, 7-1, 7-6, 7-11

Single Process Summary window, (S) *DECamds*, 3-20 to 3-26

rate, (S) *DECamds*, 3-23 to 3-24

- sinhcosh routine, (P) *Portable Math*, DPML-55, B-13
- sinh routine, (P) *Portable Math*, DPML-54, B-13
- Sinks, (S) *DECnet Mgmt*, 2-28
- logging, (S) *DECnet Mgmt*, 2-28, 3-62
 - name, (S) *DECnet Mgmt*, 2-28
 - node, (S) *DECnet Mgmt*, 2-28
 - related event, (S) *DECnet Mgmt*, 2-28
 - state, (S) *DECnet Mgmt*, 2-29
- Sink tests, (S) *DECnet Mgmt Util*, 4-7, 4-11, 4-12
- sin routine, (P) *Portable Math*, DPML-52, B-12
- SISR register
- displaying, (P) *Alpha SDA*, SDA-87; (P) *VAX SDA*, SDA-96
- SISR symbol, (P) *Alpha SDA*, SDA-16
- Site-independent startup command procedure
- See *STARTUP.COM* command procedure
- Site security, (S) *Security*, 1-3; (S) *Dependable*, 5-4
- Site-specific startup command files
- elements, (S) *VMScluster Sys*, 5-10
- Site-specific startup command procedure, (P)
- Alpha SDA*, SDA-6, SDA-171
 - releasing page file blocks, (P) *Alpha SDA*, SDA-5
- Site-specific startup procedure
- See *SYS\$MANAGER:SYSTARTUP_VMS.COM*
- SIZE attribute, (P) *Rec Mgmt Util*, 4-34; (P) *File Appl*, 4-33
- Skip file function, (P) *I/O User*, 3-16
- Skip sectoring, (P) *I/O User*, 2-14
- Slash (/)
- division operator, (P) *Debugger*, B-8
- Slave nodes, (S) *DECnet Mgmt*, 4-11
- SLD (satellite loader), (S) *DECnet Mgmt*, 4-14
- building, (S) *DECnet Mgmt*, 4-15
- Sliced images, (G) *Compatibility*, 4-11
- Slicing images, (S) *Sys Mgr Tuning*, 16-12
- SLIP (serial line Internet protocol), (S) *TCP/IP*, 2-7
- SLR register
- displaying, (P) *VAX SDA*, SDA-96
- SLS (Storage Library System), (G) *SW Overview*, 2-14, 7-5, 7-8; (S) *VMScluster Sys*, 1-10
- archiving backup data, (S) *Dependable*, 9-16
 - use at CSC lights out data center, (S) *Dependable*, 11-19
- Small Computer Systems Interface
- See *SCSI*
- SMB\$CHECK_FOR_MESSAGE routine, (P) *Util Routines*, SMB-14
- SMB\$INITIALIZE routine, (P) *Util Routines*, SMB-15
- SMB\$READ_MESSAGE routine, (P) *Util Routines*, SMB-17
- SMB\$READ_MESSAGE_ITEM routine, (P) *Util Routines*, SMB-20
- SMB\$SEND_TO_JOBCTL routine, (P) *Util Routines*, SMB-30
- SMB routines, (P) *Util Routines*, SMB-1
- SMG\$ADD_KEY_DEF routine, (P) *Concepts*, 7-28; (P) *SMG\$*, 3-2, SMG-3
- SMG\$BEGIN_DISPLAY_UPDATE routine, (P) *SMG\$*, 2-17, SMG-6
- SMG\$BEGIN_PASTEBOARD_UPDATE routine, (P) *SMG\$*, 2-17, SMG-7
- SMG\$CANCEL_INPUT routine, (P) *SMG\$*, 1-7, 3-1, SMG-8
- SMG\$CHANGE_PBD_CHARACTERISTICS routine, (P) *SMG\$*, 1-5, SMG-9
- SMG\$CHANGE_RENDITION routine, (P) *SMG\$*, 2-9, SMG-12
- SMG\$CHANGE_VIEWPORT routine, (P) *SMG\$*, 2-13, SMG-15
- SMG\$CHANGE_VIRTUAL_DISPLAY routine, (P) *Concepts*, 7-16; (P) *SMG\$*, 2-9, SMG-21
- SMG\$CHECK_FOR_OCCLUSION routine, (P) *Concepts*, 7-13; (P) *SMG\$*, 2-5, SMG-24
- SMG\$CONTROL_MODE routine, (P) *SMG\$*, 2-16, SMG-28
- SMG\$COPY_VIRTUAL_DISPLAY routine, (P) *SMG\$*, SMG-31
- SMG\$CREATE_KEY_TABLE routine, (P) *Concepts*, 7-28; (P) *SMG\$*, 3-2, SMG-37
- SMG\$CREATE_MENU routine, (P) *SMG\$*, 2-13, SMG-38
- SMG\$CREATE_PASTEBOARD routine, (P) *Concepts*, 7-9; (P) *SMG\$*, 1-4, 6-2, SMG-42
- SMG\$CREATE_SUBPROCESS routine, (P) *Concepts*, 7-17; (P) *SMG\$*, SMG-47
- SMG\$CREATE_VIEWPORT routine, (P) *SMG\$*, 2-12, SMG-51
- SMG\$CREATE_VIRTUAL_DISPLAY routine, (P) *Concepts*, 7-9; (P) *SMG\$*, 1-6, SMG-55
- SMG\$CREATE_VIRTUAL_KEYBOARD routine, (P) *Concepts*, 7-24; (P) *SMG\$*, 1-7, 3-1, SMG-60
- SMG\$CURSOR_COLUMN routine, (P) *SMG\$*, 2-6, SMG-64
- SMG\$CURSOR_ROW routine, (P) *SMG\$*, 2-6, SMG-65
- SMG\$DEFINE_KEY routine, (P) *SMG\$*, 3-2, SMG-66
- SMG\$DELETE_CHARS routine, (P) *Concepts*, 7-22; (P) *SMG\$*, 2-7, SMG-69
- SMG\$DELETE_KEY_DEF routine, (P) *SMG\$*, 3-2, SMG-74
- SMG\$DELETE_LINE routine, (P) *Concepts*, 7-22; (P) *SMG\$*, 2-7, SMG-76

SMG\$DELETE_MENU routine, (P) SMG\$, 2-14, SMG-80

SMG\$DELETE_PASTEBOARD routine, (P) Concepts, 7-9; (P) SMG\$, 1-5, SMG-81

SMG\$DELETE_SUBPROCESS routine, (P) Concepts, 7-17; (P) SMG\$, SMG-83

SMG\$DELETE_VIEWPORT routine, (P) SMG\$, 2-12, SMG-84

SMG\$DELETE_VIRTUAL_DISPLAY routine, (P) Concepts, 7-15; (P) SMG\$, 1-6, 2-4, 6-1, SMG-85

SMG\$DELETE_VIRTUAL_KEYBOARD routine, (P) SMG\$, 3-1, SMG-86

SMG\$DEL_TERM_TABLE routine, (P) SMG\$, 5-2, SMG-68

SMG\$DISABLE_BROADCAST_TRAPPING routine, (P) SMG\$, SMG-87

SMG\$DISABLE_UNSOLICITED_INPUT routine, (P) SMG\$, SMG-97

SMG\$DRAW_CHAR routine, (P) SMG\$, 2-10, SMG-99

SMG\$DRAW_LINE routine, (P) Concepts, 7-21; (P) SMG\$, 2-10, SMG-103

SMG\$DRAW_RECTANGLE routine, (P) Concepts, 7-21; (P) SMG\$, 2-10, SMG-108

SMG\$ENABLE_UNSOLICITED_INPUT routine, (P) SMG\$, 4-2, SMG-113

SMG\$END_DISPLAY_UPDATE routine, (P) SMG\$, 2-17, SMG-116

SMG\$END_PASTEBOARD_UPDATE routine, (P) SMG\$, 2-17, SMG-117

SMG\$ERASE_CHARS routine, (P) Concepts, 7-22; (P) SMG\$, 2-8, SMG-118

SMG\$ERASE_COLUMN routine, (P) Concepts, 7-22; (P) SMG\$, 2-8, SMG-122

SMG\$ERASE_DISPLAY routine, (P) Concepts, 7-22; (P) SMG\$, 2-8, SMG-124

SMG\$ERASE_LINE routine, (P) Concepts, 7-22; (P) SMG\$, 2-8, SMG-129

SMG\$ERASE_PASTEBOARD routine, (P) Concepts, 7-9; (P) SMG\$, 1-5, SMG-133

SMG\$EXECUTE_COMMAND routine, (P) Concepts, 7-17; (P) SMG\$, SMG-135

SMG\$FIND_CURSOR_DISPLAY routine, (P) SMG\$, SMG-137

SMG\$FLUSH_BUFFER routine, (P) SMG\$, 2-16, SMG-139

SMG\$FLUSH_DISPLAY_UPDATE routine, (P) SMG\$, 2-17, SMG-140

SMG\$GET_BROADCAST_MESSAGE routine, (P) SMG\$, 4-2, SMG-141

SMG\$GET_CHAR_AT_PHYSICAL_CURSOR routine, (P) SMG\$, SMG-143

SMG\$GET_DISPLAY_ATTR routine, (P) SMG\$, SMG-145

SMG\$GET_KEYBOARD_ATTRIBUTES routine, (P) SMG\$, 3-2, SMG-151

SMG\$GET_KEY_DEF routine, (P) SMG\$, SMG-148

SMG\$GET_NUMERIC_DATA routine, (P) SMG\$, 5-2, SMG-154

SMG\$GET_PASTEBOARD_ATTRIBUTES routine, (P) SMG\$, 1-5

SMG\$GET_PASTING_INFO routine, (P) SMG\$, SMG-156, SMG-158

SMG\$GET_TERM_DATA routine, (P) SMG\$, 5-2, SMG-160

SMG\$GET_VIEWPORT_CHAR routine, (P) SMG\$, 2-13, SMG-162

SMG\$HOME_CURSOR routine, (P) Concepts, 7-18; (P) SMG\$, 2-7, SMG-166

SMG\$INIT_TERM_TABLE routine, (P) SMG\$, 5-2, SMG-168

SMG\$INIT_TERM_TABLE_BY_TYPE routine, (P) SMG\$, 5-2, SMG-170

SMG\$INSERT_CHARS routine, (P) Concepts, 7-19; (P) SMG\$, 2-8, SMG-172

SMG\$INSERT_LINE routine, (P) Concepts, 7-20; (P) SMG\$, 2-8, SMG-178

SMG\$INVALIDATE_DISPLAY routine, (P) SMG\$, SMG-184

SMG\$KEYCODE_TO_NAME routine, (P) SMG\$, 3-4, SMG-185

SMG\$LABEL_BORDER routine, (P) Concepts, 7-11; (P) SMG\$, SMG-187

SMG\$LIST_KEY_DEFS routine, (P) SMG\$, SMG-193

SMG\$LIST_PASTEBOARD_ORDER routine, (P) SMG\$, 2-5, SMG-196

SMG\$LIST_PASTING_ORDER routine, (P) Concepts, 7-15; (P) SMG\$, 2-5, SMG-198

SMG\$LOAD_KEY_DEFS routine, (P) SMG\$, 3-2, SMG-200

SMG\$LOAD_VIRTUAL_DISPLAY routine, (P) SMG\$, 2-15, SMG-202

SMG\$ logical name
debugging screen-oriented program, (P) Debugger, 13-5

SMG\$MOVE_TEXT routine, (P) SMG\$, 2-4, SMG-204

SMG\$MOVE_VIRTUAL_DISPLAY routine, (P) SMG\$, 2-3, SMG-207

SMG\$NAME_TO_KEYCODE routine, (P) SMG\$, 3-4, SMG-209

SMG\$PASTE_VIRTUAL_DISPLAY routine, (P) Concepts, 7-9; (P) SMG\$, 2-1, SMG-211

SMG\$POP_VIRTUAL_DISPLAY routine, (P) Concepts, 7-31; (P) SMG\$, 2-4, 6-2, SMG-214

SMG\$PRINT_PASTEBOARD routine, (P) SMG\$, SMG-216

- SMG\$PUT_CHARS routine, (P) SMG\$, 2-8, SMG-218
- SMG\$PUT_CHARS_HIGHWIDE routine, (P) *Concepts*, 7-19; (P) SMG\$, 2-8, SMG-223
- SMG\$PUT_CHARS_MULTI routine, (P) SMG\$, 2-8, SMG-226
- SMG\$PUT_CHARS_WIDE routine, (P) SMG\$, 2-8, SMG-229
- SMG\$PUT_HELP_TEXT routine, (P) SMG\$, SMG-232
- SMG\$PUT_LINE routine, (P) *Concepts*, 7-20; (P) SMG\$, 2-9, SMG-235
- SMG\$PUT_LINE_HIGHWIDE routine, (P) SMG\$, 2-9, SMG-242
- SMG\$PUT_LINE_MULTI routine, (P) SMG\$, 2-9, SMG-245
- SMG\$PUT_LINE_WIDE routine, (P) *Concepts*, 7-20; (P) SMG\$, 2-9, SMG-250
- SMG\$PUT_PASTEBOARD routine, (P) SMG\$, SMG-255
- SMG\$PUT_STATUS_LINE routine, (P) SMG\$, SMG-257
- SMG\$PUT_WITH_SCROLL routine, (P) *Concepts*, 7-20
- SMG\$READ_COMPOSED_LINE routine, (P) *Concepts*, 7-28; (P) SMG\$, 1-7, 3-2, SMG-259
- SMG\$READ_FROM_DISPLAY routine, (P) *Concepts*, 7-24; (P) SMG\$, 2-12, SMG-264
- SMG\$READ_KEYSTROKE routine, (P) SMG\$, 3-1, SMG-269
- SMG\$READ_LOCATOR routine, (P) SMG\$, SMG-276
- SMG\$READ_STRING routine, (P) *Concepts*, 7-24; (P) SMG\$, 1-7, 3-1, SMG-279
- SMG\$READ_VERIFY routine, (P) SMG\$, 3-1, SMG-290
- SMG\$REMOVE_LINE routine, (P) SMG\$, 2-10, SMG-296
- SMG\$REPAINT_LINE routine, (P) SMG\$, SMG-298
- SMG\$REPAINT_SCREEN routine, (P) SMG\$, SMG-300
- SMG\$REPASTE_VIRTUAL_DISPLAY routine, (P) SMG\$, 2-3, SMG-304
- SMG\$REPLACE_INPUT_LINE routine, (P) SMG\$, SMG-310
- SMG\$RESTORE_PHYSICAL_SCREEN routine, (P) *Concepts*, 7-30; (P) SMG\$, 6-3, SMG-313
- SMG\$RETURN_CURSOR_POS routine, (P) *Concepts*, 7-18; (P) SMG\$, 2-6, SMG-315
- SMG\$RETURN_INPUT_LINE routine, (P) SMG\$, SMG-317
- SMG\$RING_BELL routine, (P) SMG\$, SMG-320
- SMG\$SAVE_PHYSICAL_SCREEN routine, (P) *Concepts*, 7-30; (P) SMG\$, 6-3, SMG-321
- SMG\$SAVE_VIRTUAL_DISPLAY routine, (P) SMG\$, 2-15, SMG-323
- SMG\$SCROLL_DISPLAY_AREA routine, (P) *Concepts*, 7-20; (P) SMG\$, SMG-325
- SMG\$SCROLL_VIEWPORT routine, (P) SMG\$, 2-13, SMG-328
- SMG\$SELECT_FROM_MENU routine, (P) SMG\$, 2-14, SMG-335
- SMG\$SET_BROADCAST_TRAPPING routine, (P) SMG\$, 4-2, SMG-351
- SMG\$SET_CURSOR_ABS routine, (P) *Concepts*, 7-18; (P) SMG\$, 2-7, SMG-353
- SMG\$SET_CURSOR_MODE routine, (P) SMG\$, SMG-355
- SMG\$SET_CURSOR_REL routine, (P) *Concepts*, 7-18; (P) SMG\$, 2-7, SMG-357
- SMG\$SET_DEFAULT_STATE routine, (P) SMG\$, SMG-359
- SMG\$SET_DISPLAY_SCROLL_REGION routine, (P) *Concepts*, 7-20; (P) SMG\$, SMG-361
- SMG\$SET_KEYPAD_MODE routine, (P) SMG\$, 3-2, SMG-363
- SMG\$SET_OUT_OF_BAND_ASTS routine, (P) SMG\$, 4-2, SMG-365
- SMG\$SET_PHYSICAL_CURSOR routine, (P) *Concepts*, 7-18; (P) SMG\$, SMG-369
- SMG\$SET_TERM_CHARACTERISTICS routine, (P) SMG\$, SMG-371
- SMG\$SNAPSHOT routine, (P) SMG\$, 2-15, SMG-375
- SMG\$SNAPSHOT_TO_PRINTER routine, (P) SMG\$, 2-15, SMG-377
- SMG\$UNPASTE_VIRTUAL_DISPLAY routine, (P) *Concepts*, 7-15; (P) SMG\$, 2-2, 6-2, SMG-379
- SMISERVER process, (S) *Sys Mgr Essentials*, 2-12
- attributes of, (S) *Sys Mgr Essentials*, 2-16
- changing, (S) *Sys Mgr Essentials*, 2-16
- starting, (S) *Sys Mgr Essentials*, 2-12
- in system startup, (S) *Sys Mgr Essentials*, 5-5
- SMP (symmetric multiprocessing), (G) *SW Overview*, 1-4
- See also Multiprocessing
- after CPU failure, (S) *Dependable*, 4-12
- comparison on Alpha and VAX systems, (S) *Comparison*, 2-18
- equivalent processing functions, (S) *Dependable*, 4-4
- features of multiple CPUs, (S) *Dependable*, 5-10
- multiprocessing synchronization images, (S) *Comparison*, 2-18

- SMP (symmetric multiprocessing) nodes, (S) *DECamsd*, 2-3
- SMP parameters, (S) *Comparison*, 2-19 to 2-20
- SMP_CPUS system parameter, (S) *Sys Mgr Tuning*, 26-3, 26-6
- SMTP (Simple Mail Transfer Protocol), (S) *TCP/IP*, 2-5
- Snapshot facility (Snapshot), (G) *Compatibility*, 1-8, 1-9; (S) *Sys Mgr Essentials*, 4-19
- Snapshot files
 - displaying information in, (P) *VAX SDA*, SDA-168
- SNMP (Simple Network Management Protocol), (S) *TCP/IP*, 2-5
- Soft faults
 - characterizing, (S) *VAX Perform*, 4-6
- Software
 - Refer also to the *OpenVMS Software Overview*
 - analyzing options, (S) *Dependable*, 3-7 to 3-12
 - application software dependability features, (S) *Dependable*, 8-35 to 8-58
 - building block, (S) *Dependable*, 1-15 to 1-16
 - evolution, (S) *Dependable*, 8-31
 - fifth generation languages (5GL), (S) *Dependable*, 3-9
 - fourth generation languages (4GL), (S) *Dependable*, 3-9
 - managing shared information, (S) *Dependable*, 8-58 to 8-61
 - OpenVMS dependability features, (S) *Dependable*, 8-10 to 8-28
 - prototyping applications, (S) *Dependable*, 8-31 to 8-33
 - quality metrics and mindsets, (S) *Dependable*, 3-10
 - remote access with DNS, (S) *Dependable*, 8-60
 - scalability, (S) *Dependable*, 8-30
 - systems integration, (S) *Dependable*, 8-31
 - transaction processing, (S) *Dependable*, 3-9
 - writing custom applications, (S) *Dependable*, 3-8
- Software development
 - environment, (G) *SW Overview*, 4-18
 - life cycle, (G) *SW Overview*, 4-3
 - tools, (G) *SW Overview*, 4-2, 6-14
- Software errors, (P) *File Appl*, 10-2
 - DECnet messages, (S) *DECnet Intro*, 3-31
 - OPCOM failure, (S) *Sys Mgr Essentials*, 2-22
 - queue manager, (S) *Sys Mgr Essentials*, 12-14
 - when booting, (S) *Sys Mgr Essentials*, 4-16
- Software fault tolerance
 - provided by DEC Reliable Transaction Router, (S) *Dependable*, 8-2 to 8-10
- Software installation
 - See also *Installing software*
 - identifying kit location, (S) *Sys Mgr Essentials*, 3-28
- Software interrupts
 - exceptions, (P) *DECthreads*, A-7
- Software interrupt status register, (P) *Alpha SDA*, SDA-16
- Software license
 - definition, (S) *Sys Mgr Essentials*, 3-8
- Software loopback tests, (S) *DECnet Intro*, 4-9; (S) *DECnet Mgmt*, 7-6, 7-7
- Software Performance Reports
 - See *SPRs*
- Software products
 - consistent installation of, (S) *Sys Mgr Essentials*, 3-22
 - converting formats, (S) *Sys Mgr Essentials*, 3-33
 - copying to new locations, (S) *Sys Mgr Essentials*, 3-33
 - dependencies on other products, (S) *Sys Mgr Essentials*, 3-27
 - installing more than one, (S) *Sys Mgr Essentials*, 3-29
 - reconfiguring after installing, (S) *Sys Mgr Essentials*, 3-32
 - registering noncompliant software, (S) *Sys Mgr Essentials*, 3-27
 - release notes, (S) *Sys Mgr Essentials*, 3-29
 - removing after installing, (S) *Sys Mgr Essentials*, 3-34
 - tracking dependencies of, (S) *Sys Mgr Essentials*, 3-27
- Software transmissions
 - loading downline to target node, (S) *DECnet Mgmt Util*, 3-44
 - loading downline to target node on specified circuit, (S) *DECnet Mgmt Util*, 3-47
- SOGW user category abbreviation, (S) *Security*, 4-24; (S) *Sys Mgr Essentials*, 11-8
- Solid-state disks, (S) *VAX Perform*, 3-33
- SONET OC-3 intersite link specifications, (G) *V6.2 New Feat*, 8-10
- SOR\$\$STAT routine, (P) *Util Routines*, SOR-49
- SOR\$BEGIN_MERGE routine, (P) *Util Routines*, SOR-17
- SOR\$BEGIN_SORT routine, (P) *Util Routines*, SOR-24
- SOR\$DTYPE routine, (P) *Util Routines*, SOR-30
- SOR\$END_SORT routine, (P) *Util Routines*, SOR-33
- SOR\$PASS_FILES routine, (P) *Util Routines*, SOR-35
- SOR\$RELEASE_REC routine, (P) *Util Routines*, SOR-40
- SOR\$RETURN_REC routine, (P) *Util Routines*, SOR-42

- SOR\$SORT_MERGE routine, (P) *Util Routines*, SOR-44
- SOR\$SPEC_FILE routine, (P) *Util Routines*, SOR-47
- SOR routines, (P) *Util Routines*, SOR-1
 - examples, (P) *Util Routines*, SOR-4 to SOR-16
 - interface
 - file, (P) *Util Routines*, SOR-2
 - record, (P) *Util Routines*, SOR-2
 - list of, (P) *Util Routines*, SOR-1
 - reentrancy using context argument, (P) *Util Routines*, SOR-3
- SORT command, (G) *User*, 11-1; (G) *DCL N-Z*, DCLII-358
 - See also Sort/Merge utility (SORT/MERGE)
 - in command procedure, (G) *User*, 11-9
 - in network operations, (S) *DECnet Intro*, 2-8
 - /KEY qualifier, (G) *User*, 11-2, 11-4
 - /NODUPPLICATES qualifier, (G) *User*, 11-5
 - /STABLE qualifier, (G) *User*, 11-5
 - using default key records, (G) *User*, 11-3
- Sorting
 - suggestions for improving performance, (P) *Rec Mgmt Util*, 2-16
- Sorting data, (S) *DECamds*, 5-12
- Sort/Merge utility (SORT/MERGE), (G) *SW Overview*, 5-11
 - collating sequence, (G) *User*, 11-7
 - default, (G) *User*, 11-7
 - defined, (G) *User*, 11-8
 - EBCDIC, (G) *User*, 11-8
 - multinational, (G) *User*, 11-8
 - NCS, (G) *User*, 11-8
 - entering records from a terminal, (G) *User*, 11-12
 - improving performance, (G) *User*, 11-15
 - during sorting, (G) *User*, 11-16, 11-17
 - managing work files, (G) *User*, 11-17
 - modifying working set extent, (G) *User*, 11-18
 - /STATISTICS qualifier, (G) *User*, 11-15
 - keys, (P) *Util Routines*, SOR-1
 - merging files, (G) *User*, 11-10
 - when sorted by key field, (G) *User*, 11-11
 - merging records
 - with identical key fields, (G) *User*, 11-11
 - open file limitation, (P) *Rec Mgmt Util*, 2-16
 - optimizing batch queues for, (S) *Sys Mgr Essentials*, 13-31
 - output files, (G) *User*, 11-6
 - qualifiers, (G) *User*, 11-18 to 11-22
 - for input file specification, (G) *User*, 11-19
 - for output file specification, (G) *User*, 11-19
 - in specification files, (G) *User*, 11-20
 - with SORT and MERGE commands, (G) *User*, 11-18
 - running as a batch job, (G) *User*, 11-9
- Sort/Merge utility (SORT/MERGE)
 - running as a batch job (cont'd)
 - command procedure, (G) *User*, 11-9
 - including input records, (G) *User*, 11-9
 - SORT command, (G) *User*, 11-1
 - sorting
 - by key field, (G) *User*, 11-4
 - noncharacter data files, (G) *User*, 11-7
 - record fields, (G) *User*, 11-2
 - records, (G) *User*, 11-1, 11-2
 - with identical key fields, (G) *User*, 11-5, 11-6
 - with multiple key field, (G) *User*, 11-4
 - specification files, (G) *User*, 11-12, 11-13
 - creating, (G) *User*, 11-13
 - format, (G) *User*, 11-12
 - including comments, (G) *User*, 11-13
 - order of qualifiers, (G) *User*, 11-13
 - overriding commands, (G) *User*, 11-13
 - using default key records, (G) *User*, 11-3
 - using over the network, (S) *DECnet Intro*, 2-8
- Sort order
 - effect on record retrieval, (P) *File Appl*, 2-5
 - establishing, (P) *RMS Ref*, 6-6
- Source and destination locations of software kits, (S) *Sys Mgr Essentials*, 3-28
- SOURCE attribute, (P) *Rec Mgmt Util*, 4-36
- Source Code Analyzer
 - DEC LSE/SCA, (S) *Dependable*, 8-58
- Source directory
 - displaying, (P) *Debugger*, 10-2
 - search list, (P) *Debugger*, 10-2
- Source display, (P) *Debugger*, 3-1, 6-3, 10-1, 11-1
 - discrepancies in, (P) *Debugger*, 3-2, 3-4, 11-4, 13-1
 - display kind, (P) *Debugger*, 11-18
- EXAMINE/SOURCE command, (P) *Debugger*, 10-4, 11-6, 11-18
 - for routine on call stack, (P) *Debugger*, 3-22, 11-6
- line-oriented, (P) *Debugger*, 10-3
- main window, (P) *Debugger*, 1-5
- margins in, (P) *Debugger*, 10-8
- multiprocess program, (P) *Debugger*, 14-15
- not available, (P) *Debugger*, 3-4, 6-4, 6-5, 10-1, 11-4
- optimized code, (P) *Debugger*, 3-2, 5-5, 11-8, 13-1
- SEARCH command, (P) *Debugger*, 10-5
- SET BREAK command, (P) *Debugger*, 10-7
- SET SCOPE/CURRENT command, (P) *Debugger*, 11-6
- SET STEP command, (P) *Debugger*, 10-7
- SET TRACE command, (P) *Debugger*, 10-7
- SET WATCH command, (P) *Debugger*, 10-7
- source browser, (P) *Debugger*, 3-2, 3-3
- SRC, predefined, (P) *Debugger*, 11-4
- STEP command, (P) *Debugger*, 10-7

- Source display (cont'd)
 - TYPE command, (P) *Debugger*, 10-3
- Source files
 - defined, (P) *Debugger*, 10-2
 - file specification, (P) *Debugger*, 10-2
 - location, (P) *Debugger*, 3-4, 10-2
 - not available, (P) *Debugger*, 3-4, 10-2
- Source files for installing software
 - PCSI\$SOURCE location, (S) *Sys Mgr Essentials*, 3-28
 - specifying location, (S) *Sys Mgr Essentials*, 3-28
- Source lines
 - breakpoint on, (P) *Debugger*, 3-8, 7-6
 - not available, (P) *Debugger*, 3-4, 6-4, 10-1
 - tracepoint on, (P) *Debugger*, 7-6
- Source parameter
 - VMSINSTAL.COM, (S) *Sys Mgr Essentials*, 3-11
- /SOURCE qualifier, (P) *Debugger*, 10-4, 10-7, 11-6, 11-21, 16-28
- Source-related events, (S) *DECnet Mgmt*, 2-28
- Source statements in FDL files, (P) *Rec Mgmt Util*, 6-1
- Source task, (S) *DECnet Mgmt*, 8-11
- %SOURCE_SCOPE, (P) *Debugger*, 11-6, 11-18
- Space service, (P) *RMS Ref*, RMS-99
 - condition values, (P) *RMS Ref*, RMS-100
 - control block input fields, (P) *RMS Ref*, RMS-100
 - control block output fields, (P) *RMS Ref*, RMS-100
- Spanning block boundaries
 - stream records, (P) *File Appl*, 2-13
- SPAWN command, (G) *User*, 18-4; (G) *DCL N-Z*, DCLII-359 to DCLII-363; (P) *Debugger*, 5-11; (P) *Alpha SDA*, SDA-158; (P) *VAX SDA*, SDA-183
- See also ATTACH command
- and ATTACH command, (S) *Sys Mgmt Util M-Z*, 6-13
- in LANCP utility, (S) *Sys Mgmt Util A-L*, 12-39
- in LATCP, (S) *Sys Mgmt Util A-L*, 13-59
- in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-62
- /NOLOGICAL_NAMES qualifier, (G) *User*, 18-8
- /NOSYMBOL qualifier, (G) *User*, 18-8
- /NOWAIT qualifier, (G) *User*, 18-5
- SPAWN function
 - LAN Control Program (LANCP) utility, (G) *V6.2 New Feat*, 6-26; (S) *Sys Mgr Tuning*, 22-9
- Spawning a subprocess, (P) *LIB\$*, LIB-415
- Spawning processes, security implications in restricted accounts, (S) *Security*, 7-8
- Spawn mode
 - as execution mode for a startup procedure, (S) *Sys Mgr Essentials*, 5-19
- %SP built-in symbol, (P) *Debugger*, 8-22, B-4
- Specifications
 - ATM Intersite Link, (G) *V6.2 New Feat*, 8-10
 - DS3 Intersite Link, (G) *V6.2 New Feat*, 8-10
 - T3 Intersite Link, (G) *V6.2 New Feat*, 8-10
 - WAN Intersite Link, (G) *V6.2 New Feat*, 8-10
- Speed
 - See Performance
- Spin locks, (S) *Alpha Perform*, 9-8; (P) *Concepts*, 14-27
 - definition, (S) *Alpha Perform*, 9-1
 - displaying SDA information, (P) *Alpha SDA*, SDA-146; (P) *VAX SDA*, SDA-170
 - owned, (P) *Alpha SDA*, SDA-87; (P) *VAX SDA*, SDA-96
- SPL option, (P) *Rec Mgmt Util*, 4-22
- Spoiled printers
 - See Printers
- Spool-on-close option, (P) *File Appl*, 9-11
- SPRs (Software Performance Reports), (P) *File Appl*, 10-2; (P) *VAX SDA*, SDA-4, SDA-31
 - including system dump file with, (S) *Sys Mgr Tuning*, 15-2, 15-11
 - submitting to report system failure, (S) *Sys Mgr Tuning*, 15-11
- SP symbol, (P) *Alpha SDA*, SDA-15; (P) *VAX SDA*, SDA-18
- SPT (system page table)
 - displaying, (P) *Alpha SDA*, SDA-112; (P) *VAX SDA*, SDA-26, SDA-127
 - in system dump file, (P) *Alpha SDA*, SDA-4; (P) *VAX SDA*, SDA-4, SDA-9
- SQL (Structured Query Language), (G) *SW Overview*, 2-3, 2-4, 7-15; (P) *Environment*, 1-4, 2-2, 2-5
- SQL prototyping tool, (S) *Dependable*, 8-33
- SQO option, (P) *Rec Mgmt Util*, 4-23
- sqrt routine, (P) *Portable Math*, DPML-56, B-13
- Square root, (P) *MTH\$*, MTH-103, MTH-136
- SRC, source display, screen mode, (P) *Debugger*, 11-4
- SS\$_ALIGN exception, (P) *Concepts*, 13-12
 - signal array format, (P) *Concepts*, 13-15
- SS\$_DEBUG condition, (P) *Debugger*, 6-2, B-1
- SS\$_DEVACTIVE, (P) *I/O User*, 5-76
- SS\$_DEVREQERR, (P) *I/O User*, 5-76
- SS\$_ENDOFFILE return
 - LAN driver status return, (P) *I/O User*, A-8
 - magnetic tape status return, (P) *I/O User*, A-4
 - mailbox status return, (P) *I/O User*, A-5
- SS\$_HPARITH exception, (P) *Concepts*, 13-12
 - signal array format, (P) *Concepts*, 13-14

- SSP symbol, (P) *Alpha SDA*, SDA-15; (P) *VAX SDA*, SDA-18
- SSRVEXCEPT bugcheck, (P) *Alpha SDA*, SDA-19; (P) *VAX SDA*, SDA-21
- STABACKIT.COM command procedure, (S) *Sys Mgr Essentials*, 10-52, 10-53
- STACK= option, (P) *Linker*, LINK-62
- Stack commands
 - Alpha object language, (P) *Linker*, B-28
 - VAX object language, (P) *Linker*, A-23
- Stack frames, (P) *Interfaces*, 2-3
 - displaying in SDA, (P) *Alpha SDA*, SDA-78; (P) *VAX SDA*, SDA-83
 - fixed size, (P) *Calling Std*, 3-9
 - following a chain, (P) *Alpha SDA*, SDA-78; (P) *VAX SDA*, SDA-83
 - format, (P) *Calling Std*, 3-8
 - procedure descriptors, (P) *Calling Std*, 3-5
 - procedures, (P) *Calling Std*, 3-4
 - register save area, (P) *Calling Std*, 3-12
 - variable size, (P) *Calling Std*, 3-10
- Stack guard area
 - location of, (P) *DECthreads*, cma-14, cma-20
- Stack guard region
 - multithreads, (P) *Calling Std*, 3-59
- Stack limit
 - changing size of, (P) *Sys Svc II*, SYS2-271
 - checking, (P) *DECthreads*, cma-58
 - multithreads, (P) *Calling Std*, 3-59
- Stack limit checking
 - methods, (P) *Calling Std*, 3-59
- Stack memory, (P) *DECthreads*, 3-5
- Stack overflow
 - handling, (P) *Calling Std*, 3-61
 - multithreads, (P) *Calling Std*, 3-59
- Stack pointer, (P) *Debugger*, 8-22, B-4; (P) *VAX SDA*, SDA-18
 - adjusting, (P) *Sys Svc I*, SYS1-18
- Stack region, (P) *Calling Std*, 3-59
- Stack reserve region
 - checking, (P) *Calling Std*, 3-61
 - multithreads, (P) *Calling Std*, 3-59
- Stack return
 - mechanism, (P) *Calling Std*, 3-55
 - values to top, (P) *Calling Std*, 2-7
- Stacks, (P) *DECthreads*, 3-6
 - See also Call stacks and Scope
 - changing minimum size of, (P) *DECthreads*, cma-28
 - changing minimum size of guard area, (P) *DECthreads*, cma-20
 - changing minimum size of, (P) *DECthreads*, pthread-18
 - displaying contents, (P) *Alpha SDA*, SDA-151; (P) *VAX SDA*, SDA-177
 - for Alpha procedure calls, (P) *Interfaces*, 2-5
 - for VAX procedure calls, (P) *Interfaces*, 2-3
- Stacks (cont'd)
 - obtaining minimum size of, (P) *DECthreads*, pthread-10, cma-19
 - obtaining minimum size of guard area, (P) *DECthreads*, cma-14
 - overflow, (P) *DECthreads*, 3-6
 - preventing and detecting overflow, (P) *DECthreads*, cma-14, cma-20
 - routines for, (P) *DECthreads*, cma-58
 - sizing, (P) *DECthreads*, 3-7
- Stacksize attribute, (P) *DECthreads*, 2-7, pthread-18, cma-19, cma-28
 - obtaining, (P) *DECthreads*, pthread-10
- Stack temporary area, (P) *Calling Std*, 3-11
- Stack usage, (P) *Interfaces*, 2-3, 2-5; (P) *Calling Std*, 3-38, 6-7
 - for Alpha systems, (P) *Calling Std*, 3-8
 - for VAX, (P) *Calling Std*, 2-2
- Stack variables, (P) *Debugger*, 3-21, 7-14, 8-1
- Staffing tradeoffs, (S) *Dependable*, 4-14
- Stage checks, (S) *Sys Mgmt Util A-L*, D-1
- Stalled job status, (S) *Sys Mgr Essentials*, 13-69
- Stalled queues
 - status, (S) *Sys Mgr Essentials*, 13-51
- Standalone BACKUP, (S) *Sys Mgmt Util A-L*, 7-11
 - booting, (S) *Sys Mgr Essentials*, 10-52, 10-54
 - building, (S) *Sys Mgr Essentials*, 10-51, 10-53
 - definition, (S) *Sys Mgr Essentials*, 10-51
 - qualifiers, (S) *Sys Mgr Essentials*, 10-50
 - relation to Backup utility, (S) *Sys Mgr Essentials*, 10-51
 - using to back up the system disk, (S) *Sys Mgr Essentials*, 10-51, 10-55, 10-59
 - using to restore the system disk, (S) *Sys Mgr Essentials*, 10-57
- Standalone Backup utility, (G) *Compatibility*, 1-5
- Standalone computers
 - converting to cluster computer, (S) *VMScluster Sys*, 8-25
- Standalone configurations, (G) *SW Overview*, 1-7
 - computing capabilities, (G) *SW Overview*, 6-1
- Standard calls
 - definition, (P) *Calling Std*, 1-5
- Standard-conforming procedures
 - definition, (P) *Calling Std*, 1-6
- Standard Disk Interface (SDI), (P) *I/O User*, 2-3
- Standards
 - ANSI, (G) *SW Overview*, 2-2
 - DEC Rdb support for, (G) *SW Overview*, 7-15
 - ISO, (G) *SW Overview*, 2-2, 6-3
 - NAS support for, (G) *SW Overview*, 6-10
 - open, (G) *SW Overview*, 1-1, 2-2
 - OpenVMS support, (P) *Environment*, 1-3, 2-2
 - OpenVMS support for, (G) *SW Overview*, A-1
 - OSF AES, (G) *SW Overview*, 2-2
 - OSF DCE, (G) *SW Overview*, 2-2
 - OSF DME, (G) *SW Overview*, 2-2

Standards (cont'd)

- POSIX, (G) *SW Overview*, 2-2, 2-3
- X/Open, (G) *SW Overview*, 2-2
- Standard tape interface
 - See STI
- Standby active system kernels, (S) *Dependable*, 4-5
- Star couplers
 - in CI configurations, (S) *VMScluster Sys*, 3-2
- STARLET.OLB file, (P) *Concepts*, 17-2, 17-5; (P) *Linker*, 2-13, LINK-14
 - included in image map files, (P) *Linker*, LINK-8
 - order of processing, (P) *Linker*, 2-18
 - processing by linker, (P) *Linker*, LINK-36
- START/CPU command, (G) *DCL N-Z*, DCLII-364 to DCLII-365; (S) *Sys Mgr Tuning*, 26-3, 26-6
- Starter programs
 - capturing retransmitted packets, (S) *VMScluster Sys*, F-36
- Start I/O routine, (P) *Alpha SDA*, SDA-94; (P) *VAX SDA*, SDA-105
- Starting debugger, (P) *Debugger*, 2-1, 5-7, 14-1, 14-13
- Starting DECamds, (S) *DECamds*, 2-1
- Starting InfoServer Client for OpenVMS, (S) *Sys Mgr Tuning*, 23-10
- Starting key position, (P) *Rec Mgmt Util*, 4-28
- Starting network access, (G) *Compatibility*, 2-6; (S) *Comparison*, 6-2
- Starting queues, (G) *DCL N-Z*, DCLII-366; (S) *Sys Mgr Essentials*, 13-4
 - See also Restarting, queues
 - autostart, (G) *DCL A-M*, DCLI-202, DCLI-261; (G) *DCL N-Z*, DCLII-366; (S) *Sys Mgr Essentials*, 13-48
 - in startup command procedure, (S) *Sys Mgr Essentials*, 13-18
 - relationship to activating an autostart queue, (S) *Sys Mgr Essentials*, 13-4
 - nonautostart, (G) *DCL A-M*, DCLI-261; (S) *Sys Mgr Essentials*, 13-16, 13-48
 - in startup command procedure, (S) *Sys Mgr Essentials*, 13-18
 - queue manager, (G) *DCL N-Z*, DCLII-378
- Starting queue status, (S) *Sys Mgr Essentials*, 13-51
- Starting the Data Analyzer, (S) *DECamds*, 2-1, A-15
- Starting the Data Provider, (S) *DECamds*, A-14
- Starting the LAT software
 - with LAT\$STARTUP.COM, (S) *Sys Mgr Essentials*, 5-15; (S) *Sys Mgr Tuning*, 24-10, 24-11

- Starting the queue manager, (S) *Sys Mgr Essentials*, 12-7
 - initially, (S) *Sys Mgr Essentials*, 12-7
 - restarting, (S) *Sys Mgr Essentials*, 12-9
- STARTNET.COM command procedure, (G) *Compatibility*, 2-6; (S) *Security*, 12-16; (S) *Sys Mgr Essentials*, 5-15, 7-8; (S) *Comparison*, 6-2; (S) *DECnet Intro*, 3-14, 3-22, 3-26, 3-32, 3-33; (S) *DECnet Mgmt*, 3-72, 5-20
- Start phase of AUTOGEN
 - default, (S) *Sys Mgmt Util A-L*, 6-10
- START/QUEUE command, (G) *DCL N-Z*, DCLII-366 to DCLII-377; (S) *Sys Mgr Essentials*, 13-18
 - activating an autostart queue, (S) *Sys Mgr Essentials*, 13-49
 - assigning a default form, (S) *Sys Mgr Essentials*, 13-63
 - assigning characteristics, (S) *Sys Mgr Essentials*, 13-59
 - canceling characteristics, (S) *Sys Mgr Essentials*, 13-59
 - comparison on Alpha and VAX systems, (S) *Comparison*, 3-5
 - controlling page overflow, (S) *Sys Mgr Essentials*, 13-44
 - mounting a form, (S) *Sys Mgr Essentials*, 13-64
 - resuming printing of a suspended job, (S) *Sys Mgr Essentials*, 13-76
 - setting block limits, (S) *Sys Mgr Essentials*, 13-32
 - setting scheduling policy, (S) *Sys Mgr Essentials*, 13-32
 - setting UIC-based protection on queues, (S) *Sys Mgr Essentials*, 13-23
 - specifying autostart information, (S) *Sys Mgr Essentials*, 13-15
 - specifying banner pages, (S) *Sys Mgr Essentials*, 13-60
 - specifying job processing options, (S) *Sys Mgr Essentials*, 13-31
 - specifying queue options with, (S) *Sys Mgr Essentials*, 13-19
 - specifying reset modules, (S) *Sys Mgr Essentials*, 13-65
 - starting a generic queue, (S) *Sys Mgr Essentials*, 13-17
 - starting a nonautostart queue, (S) *Sys Mgr Essentials*, 13-48
 - using Alpha pagelet values, (S) *Comparison*, 5-11
- START/QUEUE/MANAGER command, (G) *DCL N-Z*, DCLII-378 to DCLII-381; (S) *Sys Mgr Essentials*, 12-7, 12-9
 - caution, (S) *Sys Mgr Essentials*, 12-8

START/QUEUE/MANAGER command (cont'd)

- comparison on Alpha and VAX systems, (S) *Comparison*, 3-5
- creating an additional queue manager, (S) *Sys Mgr Essentials*, 12-10
- creating a queue database, (S) *Sys Mgr Essentials*, 12-7
- specifying failover list, (S) *Sys Mgr Essentials*, 12-9
- specifying name of queue manager, (S) *Sys Mgr Essentials*, 12-10
- specifying nodes to run the queue manager, (S) *Sys Mgr Essentials*, 12-6
- storage of, (S) *Sys Mgr Essentials*, 12-7
- STARTUP\$AUTOCONFIGURE_ALL symbol, (S) *Sys Mgr Essentials*, 7-8
- STARTUP\$INTERACTIVE_LOGINS symbol, (S) *Sys Mgr Essentials*, 5-16
- STARTUP\$STARTUP_LAYERED logical name, (S) *Sys Mgr Essentials*, 5-18; (S) *Sys Mgmt Util M-Z*, 6-71
- STARTUP\$STARTUP_VMS logical name, (S) *Sys Mgr Essentials*, 5-18; (S) *Sys Mgmt Util M-Z*, 6-71
- STARTUP.COM command procedure, (S) *Sys Mgr Essentials*, 4-4, 5-3; (S) *Comparison*, 2-1
- configuring devices, (S) *Sys Mgr Essentials*, 5-7, 7-6
- definition, (S) *Sys Mgr Essentials*, 5-2
- if it does not execute, (S) *Sys Mgr Essentials*, 4-16
- message indicating execution of, (S) *Sys Mgr Essentials*, 4-5
- tasks performed by, (S) *Sys Mgr Essentials*, 4-4, 4-12; (S) *Sys Mgr Tuning*, 16-10
- STARTUP ADD command
 - in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-65
- STARTUP command, (S) *Sys Mgr Essentials*, 2-11
 - in SYSMAN, (S) *Sys Mgr Essentials*, 5-18
- Startup command procedure, (S) *Sys Mgmt Util M-Z*, 5-17, 5-31, 5-32; (S) *Comparison*, 2-22
- See also STARTUP.COM command procedure
- booting without, (S) *Sys Mgr Essentials*, 4-8
- changing execution mode, (S) *Sys Mgr Essentials*, 5-21
- changing node restrictions, (S) *Sys Mgr Essentials*, 5-21
- changing startup phase, (S) *Sys Mgr Essentials*, 5-21
- coordinating, (S) *VMScluster Sys*, 5-7
- creating common version, (S) *VMScluster Sys*, 5-8
- creating your own, (S) *Sys Mgr Essentials*, 7-10, 7-13
- DECbootsync controls satellites, (S) *VMScluster Sys*, 9-11
- enabling a temporarily disabled, (S) *Sys Mgr Essentials*, 5-22

Startup command procedure (cont'd)

- failure to complete, (S) *VMScluster Sys*, C-15
- functions that must remain computer-specific, (S) *VMScluster Sys*, 5-8
- known file lists, (S) *Sys Mgr Essentials*, 5-12
- minimum startup, (S) *VMScluster Sys*, 2-10
- minimum startup recommendations, (S) *VMScluster Sys*, 8-36, 8-43
- modifying site-specific, (S) *Sys Mgr Essentials*, 5-2
- node restriction, (S) *Sys Mgr Essentials*, 5-19
- passing parameters to, (S) *Sys Mgr Essentials*, 5-19
- preventing from executing, (S) *Sys Mgr Essentials*, 5-21
- temporarily, (S) *Sys Mgr Essentials*, 5-22
- SATELLITE_PAGE.COM
 - See SATELLITE_PAGE.COM command procedure
- setting the name, (S) *Sys Mgmt Util M-Z*, 6-46
- setting up output devices, (S) *Sys Mgr Essentials*, 13-14
- site-independent
 - specifying an alternate, (S) *Sys Mgr Essentials*, 4-12, 4-13
- site-independent file name, (S) *Sys Mgmt Util M-Z*, 5-29
- site-specific, (S) *Sys Mgr Essentials*, 5-2; (S) *DECnet Intro*, 3-19, 3-25, 3-32
- announcements, (S) *Sys Mgr Essentials*, 5-14
- creating your own, (S) *Sys Mgr Essentials*, 5-2
- definition, (S) *Sys Mgr Essentials*, 5-2
- modifying, (S) *Sys Mgr Essentials*, 5-4
- order of execution, (S) *Sys Mgr Essentials*, 5-3
- required location, (S) *Sys Mgr Essentials*, 5-4
- use in VMSKITBLD, (S) *Sys Mgr Essentials*, 5-3
- versions of, (S) *Sys Mgr Essentials*, 5-3
- site-specific elements, (S) *VMScluster Sys*, 5-10
- specifying execution mode, (S) *Sys Mgr Essentials*, 5-20
- specifying node restrictions, (S) *Sys Mgr Essentials*, 5-20
- specifying startup phase, (S) *Sys Mgr Essentials*, 5-20
- starting queues, (S) *Sys Mgr Essentials*, 13-18
- when errors prevent you from logging in, (S) *Sys Mgr Essentials*, 4-8
- Startup database
 - adding files to, (S) *Sys Mgr Essentials*, 5-20
 - changing information in, (S) *Sys Mgr Essentials*, 5-21
 - definition, (S) *Sys Mgr Essentials*, 5-18

- Startup database (cont'd)
- deleting records in, (S) *Sys Mgr Essentials*, 5-21
 - disabling files in, (S) *Sys Mgr Essentials*, 5-22
 - establishing, (S) *Sys Mgmt Util M-Z*, 6-71
 - files
 - adding, (S) *Sys Mgmt Util M-Z*, 6-65
 - deleting, (S) *Sys Mgmt Util M-Z*, 6-70
 - disabling, (S) *Sys Mgmt Util M-Z*, 6-67
 - enabling, (S) *Sys Mgmt Util M-Z*, 6-68
 - modifying, (S) *Sys Mgmt Util M-Z*, 6-69
 - reenabling disabled files in, (S) *Sys Mgr Essentials*, 5-22
 - restriction, (S) *Sys Mgr Essentials*, 5-21
 - setting the default, (S) *Sys Mgmt Util M-Z*, 6-71
 - showing contents of, (S) *Sys Mgr Essentials*, 5-20
 - showing name of the target, (S) *Sys Mgr Essentials*, 5-20
 - specifying the current, (S) *Sys Mgr Essentials*, 5-20
 - STARTUP DISABLE command
 - in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-67
 - STARTUP ENABLE command
 - in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-68
 - STARTUP MODIFY command
 - in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-69
 - Startup phases
 - determining order of, (S) *Sys Mgr Essentials*, 5-18
 - layered product, (S) *Sys Mgr Essentials*, 5-18
 - operating system, (S) *Sys Mgr Essentials*, 5-4
 - STARTUP REMOVE command
 - in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-70
 - Startup restrictions
 - InfoServer Client for OpenVMS software, (S) *Sys Mgr Tuning*, 23-12
 - PATHWORKS, (S) *Sys Mgr Tuning*, 23-12
 - RSM, (S) *Sys Mgr Tuning*, 23-12
 - SYSMAN, (S) *Sys Mgr Tuning*, 23-12
 - STARTUP SET DATABASE command
 - in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-71
 - STARTUP SET OPTIONS command, (S) *Sys Mgr Essentials*, 4-15
 - in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-72
 - STARTUP SHOW command
 - in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-73
 - STARTUP SHOW OPTIONS command, (S) *Sys Mgr Essentials*, 4-16
 - STARTUP_P1 system parameter, (S) *Security*, C-10; (S) *Sys Mgr Essentials*, 4-14
 - does not start all processes, (S) *VMScluster Sys*, 8-36, 8-43
 - minimum startup, (S) *VMScluster Sys*, 2-10
 - STARTUP_P2 system parameter, (S) *Sys Mgr Essentials*, 4-14
 - SYSMAN startup logging, (S) *Sys Mgr Essentials*, 4-15
 - STARTUP_Pn system parameters, (S) *Sys Mgmt Util M-Z*, C-39
 - in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-66
 - START/ZONE command, (G) *DCL N-Z*, DCLII-382
 - STAT entry point, (P) *Modular Proc*, 4-8
 - /STATE qualifier, (P) *Debugger*, 12-9
 - States, (P) *SMG\$*, 3-3
 - circuit, (S) *DECnet Mgmt*, 2-7, 3-28
 - lines, (S) *DECnet Mgmt*, 2-12, 3-41
 - local node, (S) *DECnet Mgmt*, 2-4
 - logging, (S) *DECnet Mgmt*, 3-65
 - substates, (S) *DECnet Mgmt Util*, C-1
 - transitions, (S) *DECnet Mgmt Util*, C-2
 - STATES class record
 - in Monitor utility, (S) *Sys Mgmt Util M-Z*, A-38
 - State transitions, (S) *VMScluster Sys*, 1-4
 - due to adding a member, (S) *VMScluster Sys*, 2-10
 - due to loss of a member, (S) *VMScluster Sys*, 2-11
 - overview, (S) *VMScluster Sys*, 2-10
 - Static asynchronous connections, (S) *DECnet Mgmt*, 1-3, 1-9
 - connection example, (S) *DECnet Intro*, 3-23
 - installing, (S) *DECnet Intro*, 3-19
 - local intermittent, (S) *DECnet Intro*, 3-22
 - network configuration, (S) *DECnet Mgmt*, 5-27
 - procedure for establishing, (S) *DECnet Intro*, 3-19
 - reasons for failure, (S) *DECnet Intro*, 4-16; (S) *DECnet Mgmt*, 5-13
 - receive password, (S) *DECnet Intro*, 3-21
 - security, (S) *DECnet Intro*, 3-21
 - switching of terminal line, (S) *DECnet Intro*, 3-22
 - transmit password, (S) *DECnet Intro*, 3-21
 - turning back on, (S) *DECnet Intro*, 3-22
 - turning on and off line and circuit, (S) *DECnet Intro*, 3-22
 - Static asynchronous lines, (S) *DECnet Mgmt*, 1-9, 2-13, 5-12
 - installing, (S) *DECnet Mgmt*, 5-12
 - shutting down, (S) *DECnet Mgmt*, 5-14
 - Static data, (P) *Calling Std*, 3-55
 - Static data alignment, (P) *Calling Std*, 3-55
 - Static memory, (P) *DECthreads*, 3-5
 - Static service rating, (S) *Sys Mgmt Util A-L*, 13-15, 13-40
 - displaying, (S) *Sys Mgmt Util A-L*, 13-51, 13-58

Static variables, (P) *Debugger*, 3-21, 7-14, 8-1

Statistics

network performance and error, (S) *DECnet Intro*, 4-3

printing, (S) *DECnet Mgmt Util*, 4-6, 4-11

produced by Convert/Reclaim utility, (P) *Rec Mgmt Util*, 2-17, 3-3

produced by Convert utility, (P) *Rec Mgmt Util*, 2-17

reporting, (S) *DECnet Mgmt Util*, 4-4, 4-6, 4-11

/STATISTICS qualifier, (P) *File Appl*, 10-6;

(P) *Alpha SDA*, SDA-121; (P) *VAX SDA*, SDA-135

Statistics reports, (P) *Rec Mgmt Util*, 1-9; (P) *File Appl*, 10-6, 10-10

Status

returned by SYS\$LAVC_DEFINE_NET_COMPONENT subroutine, (S) *VMScluster Sys*, E-6

returned by SYS\$LAVC_DEFINE_NET_PATH subroutine, (S) *VMScluster Sys*, E-8

returned by SYS\$LAVC_DISABLE_ANALYSIS subroutine, (S) *VMScluster Sys*, E-11

returned by SYS\$LAVC_ENABLE_ANALYSIS subroutine, (S) *VMScluster Sys*, E-10

returned by SYS\$LAVC_START_BUS subroutine, (S) *VMScluster Sys*, E-2

returned by SYS\$LAVC_STOP_BUS subroutine, (S) *VMScluster Sys*, E-4

Status code

controlling command interpreter response to, (G) *DCL N-Z*, DCLII-175

system service status return, (S) *DECnet Mgmt*, 8-19, 8-31

\$STATUS global symbol, (G) *DCL N-Z*, DCLII-175

changing, (G) *DCL A-M*, DCLI-222; (G) *DCL N-Z*, DCLII-51

Status of volume rebuilds, (S) *Sys Mgr Essentials*, 7-4

\$STATUS symbol

accessing value stored in, (G) *Help Msg*, 1-3

Step button, (P) *Debugger*, 1-8, 3-6

STEP command, (P) *Debugger*, 7-2, 10-7

and instruction-level debugging, (P) *Debugger*, 8-19

multiprocess program, (P) *Debugger*, 14-6

vectorized program, (P) *Debugger*, 15-3

Step-In button, (P) *Debugger*, 1-8, 3-7

Step-Return button, (P) *Debugger*, 1-8, 3-7

STI (standard tape interface), (S) *VMScluster Sys*, 1-3

Stock

See also Forms

commands used with, (S) *Sys Mgr Essentials*, 13-61

mismatch, (S) *Sys Mgr Essentials*, 13-42

Stock

mismatch (cont'd)

troubleshooting, (S) *Sys Mgr Essentials*, 13-80

specifying, (S) *Sys Mgr Essentials*, 13-42

Stop button, (P) *Debugger*, 1-8, 2-6

STOP command, (G) *DCL N-Z*, DCLII-383 to DCLII-385

in command procedures, (G) *User*, 15-14

runaway tapes, (G) *DCL A-M*, DCLI-249

STOP/CPU command, (G) *DCL N-Z*, DCLII-386, DCLII-387; (S) *Sys Mgr Tuning*, 26-3, 26-6

Stopped queue status, (S) *Sys Mgr Essentials*, 13-51

Stop pending queue status, (S) *Sys Mgr Essentials*, 13-51

Stopping data collection, (S) *DECamds*, 2-5

Stopping queues, (G) *DCL N-Z*, DCLII-394; (S) *Sys Mgr Essentials*, 13-54

abruptly, (G) *DCL N-Z*, DCLII-398

all queues on a node, (S) *Sys Mgr Essentials*, 12-9, 13-55

Stopping the queue manager, (G) *DCL N-Z*, DCLII-393; (S) *Sys Mgr Essentials*, 12-9

STOP/QUEUE/ABORT command, (G) *DCL N-Z*, DCLII-389, DCLII-390

STOP/QUEUE command, (G) *DCL N-Z*, DCLII-388; (S) *Sys Mgr Essentials*, 13-53, 13-75

STOP/QUEUE/ENTRY command, (G) *DCL N-Z*, DCLII-391, DCLII-392

STOP/QUEUE/MANAGER/CLUSTER command, (G) *DCL N-Z*, DCLII-393; (S) *Sys Mgr Essentials*, 12-9

STOP/QUEUE/NEXT command, (G) *DCL N-Z*, DCLII-394; (S) *Sys Mgr Essentials*, 13-49, 13-54

with autostart queues, (S) *Sys Mgr Essentials*, 13-54

STOP/QUEUE/REQUEUE command, (G) *DCL N-Z*, DCLII-395 to DCLII-397

STOP/QUEUE/RESET command, (G) *DCL N-Z*, DCLII-398, DCLII-399; (S) *Sys Mgr Essentials*, 13-49, 13-54

with autostart queues, (S) *Sys Mgr Essentials*, 13-54

STOP/QUEUES/ON_NODE command, (G) *DCL N-Z*, DCLII-400 to DCLII-402; (S) *Sys Mgr Essentials*, 12-9

entering before shutting down a system, (S) *Sys Mgr Essentials*, 13-55

relationship to DISABLE AUTOSTART/QUEUES command, (S) *Sys Mgr Essentials*, 13-55

STOP/ZONE command, (G) *DCL N-Z*, DCLII-403

Storage, (P) *Modular Proc*, 2-11

heap, (P) *Modular Proc*, 2-11

initializing, (P) *Modular Proc*, 3-9

Storage (cont'd)

- stack, (P) *Modular Proc*, 2-11
- static, (P) *Modular Proc*, 2-12, A-4
- summary, (P) *Modular Proc*, 2-13
- types of, (P) *DECthreads*, 3-5
- Storage bit map file, (P) *File Appl*, 1-7
- definition, (S) *Sys Mgr Tuning*, A-8
- storage control block (SCB), (S) *Sys Mgr Tuning*, A-8
- Storage control blocks
 - See SCBs
- Storage management, (G) *SW Overview*, 3-10
 - database dependability features, (S) *Dependable*, 8-35
 - database failover in VMSclusters, (S) *Dependable*, 8-35
 - in VMScluster configurations
 - Refer to the *Guidelines for VMScluster Configurations*
 - online database backups, (S) *Dependable*, 8-40
 - redundant disk devices, (S) *Dependable*, 4-4
 - software, (G) *SW Overview*, 2-14
 - tools, (G) *SW Overview*, 3-10, 7-7
- StorageWorks
 - BA350/BA353 enclosures, (G) *V6.2 New Feat*, 7-9
- StorageWorks RAID Array, (S) *Sys Mgr Essentials*, 10-42
- Store commands
 - Alpha object language, (P) *Linker*, B-29
 - VAX object language, (P) *Linker*, A-25
- Store-conditional instructions, (P) *Concepts*, 14-8
- Stored semantics file attribute, (P) *RMS Ref*, 10-10; (P) *File Appl*, 4-19
- STR\$ADD routine, (P) *STR\$*, STR-3
- STR\$ANALYZE_SDESC routine, (P) *STR\$*, 2-4, STR-7
- STR\$APPEND routine, (P) *STR\$*, 2-9, STR-9
- STR\$CASE_BLIND_COMPARE routine, (P) *STR\$*, STR-11
- STR\$COMPARE routine, (P) *STR\$*, STR-13
- STR\$COMPARE_EQL routine, (P) *STR\$*, STR-15
- STR\$COMPARE_MULTI routine, (P) *STR\$*, STR-17
- STR\$CONCAT routine, (P) *STR\$*, 2-9, STR-19
- STR\$COPY_DX routine, (P) *STR\$*, 2-6, 2-8, STR-22
- STR\$COPY_R routine, (P) *STR\$*, STR-24
- STR\$DIVIDE routine, (P) *STR\$*, STR-26
- STR\$DUPL_CHAR routine, (P) *STR\$*, STR-30
- STR\$ELEMENT routine, (P) *STR\$*, STR-32
- STR\$FIND_FIRST_IN_SET routine, (P) *STR\$*, STR-34
- STR\$FIND_FIRST_NOT_IN_SET routine, (P) *STR\$*, STR-36

- STR\$FIND_FIRST_SUBSTRING routine, (P) *STR\$*, STR-39
- STR\$FREE1_DX routine, (P) *STR\$*, STR-42
- STR\$GET1_DX routine, (P) *STR\$*, STR-43; (P) *File Appl*, 5-10
- STR\$LEFT routine, (P) *STR\$*, 2-9, STR-45
- STR\$LEN_EXTR routine, (P) *STR\$*, STR-48
- STR\$MATCH_WILD routine, (P) *STR\$*, STR-51
- STR\$MUL routine, (P) *STR\$*, STR-54
- STR\$POSITION routine, (P) *STR\$*, STR-58
- STR\$POS_EXTR routine, (P) *STR\$*, 2-9
- STR\$POS_EXTR routine, (P) *STR\$*, STR-61
- STR\$PREFIX routine, (P) *STR\$*, 2-9, STR-64
- STR\$RECIP routine, (P) *STR\$*, STR-66
- STR\$REPLACE routine, (P) *STR\$*, STR-70
- STR\$RIGHT routine, (P) *STR\$*, 2-9, STR-73
- STR\$ROUND routine, (P) *STR\$*, STR-76
- STR\$TRANSLATE routine, (P) *STR\$*, STR-80
- STR\$TRIM routine, (P) *STR\$*, STR-83
- STR\$UPCASE routine, (P) *STR\$*, STR-85
- Strategies
 - for building dependable systems, (S) *Dependable*, 1-10 to 1-12
- STREAM carriage control, (P) *Rec Mgmt Util*, 2-3
- STREAM formats, (P) *Rec Mgmt Util*, 4-33
- Streamlined multiprocessing synchronization images, (S) *Comparison*, 2-18
- Stream record format
 - set of terminating characters, (P) *File Appl*, 2-13
- Stream record type, (P) *File Appl*, 1-30
- Stream timer, (S) *DECnet Mgmt*, 3-43
- STREAM_CR format, (P) *File Appl*, 2-13
- STREAM_LF format, (P) *File Appl*, 2-13
- String arithmetic
 - addition of decimal strings, (P) *STR\$*, STR-4
 - division of decimal strings, (P) *STR\$*, STR-28
 - multiplication, (P) *STR\$*, STR-55
- := (string assignment) command, (G) *DCL A-M*, DCLI-5 to DCLI-7
- String assignments
 - including symbols, (G) *User*, 14-7
- String data types, (P) *Calling Std*, 4-4
- String descriptors, (P) *LIB\$*, LIB-10; (P) *STR\$*, STR-8
- String keys, (P) *RMS Ref*, RMS-20
 - specifying size value, (P) *RMS Ref*, 6-4
- String key type, (P) *Rec Mgmt Util*, 4-30
- String manipulation routines, (P) *STR\$*, 2-1
 - descriptor classes and string semantics, (P) *STR\$*, 2-4
 - how to select, (P) *STR\$*, 2-8
 - list of severe errors, (P) *STR\$*, 2-10
 - reading input string arguments, (P) *STR\$*, 2-5
 - writing output string arguments, (P) *STR\$*, 2-6

/STRING qualifier, (P) *Debugger*, 10-6

Strings

See also Descriptors

allocating, (P) *OTS*\$, OTS-93

appending source string to end of destination string, (P) *STR*\$, STR-9

comparing for equality, no padding, (P) *STR*\$, STR-15

comparing two, (P) *STR*\$, STR-13

comparing without regard to case, (P) *STR*\$, STR-11

concatenating, (P) *STR*\$, STR-20

converting to uppercase, (P) *STR*\$, STR-85

copying by descriptor, (P) *LIB*\$, LIB-370; (P) *OTS*\$, OTS-87; (P) *STR*\$, STR-23

copying by reference, (P) *LIB*\$, LIB-372; (P) *OTS*\$, OTS-89; (P) *STR*\$, STR-25

dividing two decimal strings, (P) *STR*\$, STR-28

dynamic length, (P) *STR*\$, 2-2, 2-10, 2-11

evaluation rules, (P) *STR*\$, 2-1

finding substring, (P) *STR*\$, STR-59

fixed length, (P) *STR*\$, 2-1

formatting output, (P) *Sys Svc I*, SYS1-272

freeing, (P) *OTS*\$, OTS-92

inserting source string at front of destination, (P) *STR*\$, STR-64

maximum length of, (P) *STR*\$, 2-1

null strings, (P) *STR*\$, 2-10

output length argument, (P) *STR*\$, 2-7

reciprocal of decimal string, (P) *STR*\$, STR-67

removing trailing blanks and tabs, (P) *STR*\$, STR-84

rounding or truncating a decimal string, (P) *STR*\$, STR-77

searching for file specification in, (P) *Sys Svc I*, SYS1-291

semantics of, (P) *STR*\$, 2-1, 2-4

skipping characters in, (P) *LIB*\$, LIB-412

translating matched characters, (P) *STR*\$, STR-81

String types, (P) *Debugger*, 8-16, 8-28

String with bounds descriptors, (P) *Calling Std*, 5-21

Stripe sets

shadowed, (S) *VMScluster Sys*, 6-24

Striping data on disks

dependability features, (S) *Dependable*, 8-26

Strong symbol

definition, (P) *Linker*, 2-19

reference, (P) *Linker*, 2-19

Structured Query Language

See SQL

Structure levels

defining for disks, (G) *DCL A-M*, DCLI-256

STS field

contents, (P) *RMS Ref*, 2-6

Stubs

See Program stubs

STV field

See also Completion status value field

contents, (P) *RMS Ref*, 2-6

Subdirectories

See also Directories

creating, (G) *User*, 5-3; (G) *DCL A-M*, DCLI-91

listing, (G) *User*, 5-3

setting default to another, (G) *User*, 5-5

syntax, (G) *User*, 5-3

Sublock, (P) *Concepts*, 15-14

Submit access, (S) *Security*, 5-17

SUBMIT/AFTER command, (G) *User*, 18-11

SUBMIT command, (G) *User*, 18-10; (G) *DCL A-M*, DCLI-280; (G) *DCL N-Z*, DCLII-404 to DCLII-414

/LOG qualifier, (G) *User*, 18-14

passing parameters to command procedures with, (G) *User*, 16-5

preventing users from executing, (S) *Sys Mgr Essentials*, 13-53

processing of, (S) *Sys Mgr Essentials*, 13-2

qualifiers, (G) *User*, 18-17

qualifiers using Alpha pagelet values, (S) *Comparison*, 5-11

/RESTART qualifier, (G) *User*, 18-19

specifying characteristics, (S) *Sys Mgr Essentials*, 13-28

specifying job retention, (S) *Sys Mgr Essentials*, 13-74

specifying multiple command procedures with, (G) *User*, 18-12

specifying scheduling priority, (S) *Sys Mgr Essentials*, 13-72

using with command procedures, (G) *User*, 15-24

SUBMIT/REMOTE command

in network operations, (S) *DECnet Intro*, 2-13

SUBMIT_ON_CLOSE attribute, (P) *Rec Mgmt Util*, 4-24

SUBMON.COM command procedure, (S) *Alpha Perform*, 7-7

sample, (S) *Sys Mgr Tuning*, 18-41

used with Monitor utility, (S) *Sys Mgr Tuning*, 18-39

Subnets, (S) *TCP/IP*, 2-6

Subprocesses, (P) *Concepts*, 1-1; (P) *SMG*\$, 4-2;

(P) *Alpha SDA*, SDA-158; (P) *VAX SDA*, SDA-183

See also Detached processes and Processes

accounting, (G) *DCL N-Z*, DCLII-57

and job trees, (G) *User*, 18-4

assigning resource quotas to, (G) *DCL N-Z*, DCLII-56

Subprocesses (cont'd)

- base priority, (S) *Alpha Perform*, 6-21
- characteristics inherited from parent process, (G) *User*, 18-7
- connecting to using LIB\$ATTACH routine, (P) *Concepts*, 6-9
- context, (G) *User*, 18-7
- creating, (G) *User*, 18-4, 18-5; (P) *Sys Svc I*, SYS1-150; (P) *SMG\$*, 4-2
 - multiple, (G) *User*, 18-5
 - with LIB\$SPAWN, (P) *Concepts*, 1-3
 - with PPL\$ routines, (P) *Concepts*, 14-27
 - with PPL\$SPAWN, (P) *Concepts*, 1-5
 - with SMG\$ routines, (P) *Concepts*, 7-17
 - with SYS\$CREPRC, (P) *Concepts*, 1-5
- creating from LATCP, (S) *Sys Mgmt Util A-L*, 13-6, 13-59
- creating with RUN command, (G) *DCL N-Z*, DCLII-55
- creating with SPAWN command, (G) *DCL N-Z*, DCLII-359; (S) *Sys Mgmt Util M-Z*, 6-62
- creating with the LANCP SPAWN command, (S) *Sys Mgmt Util A-L*, 12-39
- creating with the LANCP SPAWN function, (G) *V6.2 New Feat*, 6-26; (S) *Sys Mgr Tuning*, 22-9
- creation of using LIB\$SPAWN routine, (P) *Concepts*, 6-9
- defining attributes, (G) *DCL N-Z*, DCLII-56
- defining equivalence names for process-permanent logical names, (G) *DCL N-Z*, DCLII-55
- definition, (G) *User*, 18-4
- deleting, (P) *SMG\$*, 4-2
- deleting with PPL\$ routines, (P) *Concepts*, 14-27
- disk and directory default, (P) *Concepts*, 1-9
- displaying characteristics of, (G) *DCL N-Z*, DCLII-311
- displaying quotas, (G) *DCL N-Z*, DCLII-314
- establishing values for, (S) *VAX Perform*, 5-5; (S) *Alpha Perform*, 17-4
- excluding characteristics from parent process, (G) *User*, 18-7
- executing commands, (P) *SMG\$*, 4-3
- exiting, (G) *User*, 18-6
- image, (P) *Concepts*, 1-9
- image hibernation, (G) *DCL N-Z*, DCLII-57
- input, output, and error device, (P) *Concepts*, 1-6
- names, (G) *DCL N-Z*, DCLII-61
- naming with RUN/PROCESS_NAME, (G) *DCL N-Z*, DCLII-57
- priority setting, (P) *Concepts*, 3-30
- program debugging, (P) *Concepts*, 1-10
- scheduling wakeup, (G) *DCL N-Z*, DCLII-59
- specifying default working set, (G) *DCL N-Z*, DCLII-63

Subprocesses (cont'd)

- specifying quotas, (G) *DCL N-Z*, DCLII-59
- subprocess creation limit, (S) *Sys Mgr Essentials*, 6-2, 6-43
- switching control of input stream to, (G) *DCL A-M*, DCLI-49; (S) *Sys Mgmt Util M-Z*, 6-13
- transferring control, (G) *User*, 18-8
- working set characteristics, (S) *Alpha Perform*, 6-2
- SUBROUTINE command, (G) *DCL A-M*, DCLI-53, DCLI-54; (G) *DCL N-Z*, DCLII-415
- Subroutines
 - termination of GOSUB, (G) *DCL N-Z*, DCLII-51
- Substrings, (P) *STR\$*, 2-1
 - replacing, (P) *STR\$*, STR-71
- Subsystem ACEs, (S) *Security*, 8-8, 13-3 to 13-5; (S) *Sys Mgmt Util A-L*, 1-15
 - example, (S) *Sys Mgr Essentials*, 11-10; (S) *Sys Mgmt Util A-L*, 1-15
 - specifying identifier characteristics, (S) *Sys Mgmt Util A-L*, 1-16
 - specifying identifiers, (S) *Sys Mgmt Util A-L*, 1-16
- Subsystem attribute, (S) *Sys Mgmt Util A-L*, 5-21, 5-29, 5-37; (P) *Concepts*, 23-5
- Subsystem level redundancy, (S) *Dependable*, 4-4
- /SUBSYSTEM qualifier
 - in Mount utility, (S) *Sys Mgmt Util M-Z*, 2-35
- Subsystems
 - See Protected subsystems
- Subtraction
 - quadword times, (P) *LIB\$*, LIB-431
 - two's complement, (P) *LIB\$*, LIB-430
- Subtraction operator (-), (P) *Alpha SDA*, SDA-13; (P) *VAX SDA*, SDA-16
- Success completion routine, (P) *RMS Ref*, 2-4
- Successor
 - See Logical successor
- /SUFFIX qualifier, (P) *Debugger*, 14-16
- /SUMMARY qualifier, (P) *Alpha SDA*, SDA-121; (P) *VAX SDA*, SDA-135
- Summary report
 - example, (S) *Sys Mgmt Util A-L*, 9-24
- Summary XAB
 - for key information, (P) *RMS Ref*, 12-1
- SUMSLP editor, (G) *DCL A-M*, DCLI-197
- SUMSLP utility (SUMSLP), (P) *Environment*, 5-3
 - Refer also to the *OpenVMS SUMSLP Utility Manual*
 - same on VAX and Alpha systems, (S) *Comparison*, 3-3
- SUPERSEDE attribute, (P) *Rec Mgmt Util*, 4-24; (P) *File Appl*, 4-31

- Supersede option, (P) *File Appl*, 4-31, 5-9
- Supervisor mode, (S) *Alpha Perform*, 9-7
 - logical names, (S) *Sys Mgr Tuning*, 16-15
- Supervisor-mode (PSL\$C_SUPER) constant for FAB\$V_CHAN_MODE, (P) *RMS Ref*, 4-6
- /SUPERVISOR qualifier, (P) *Alpha SDA*, SDA-151; (P) *VAX SDA*, SDA-177
- Supervisor stack
 - displaying contents, (P) *Alpha SDA*, SDA-151; (P) *VAX SDA*, SDA-177
- Supervisor stack pointer, (P) *Alpha SDA*, SDA-15; (P) *VAX SDA*, SDA-18
- Supplementary Volume Descriptor
 - See SVD
- Support consulting
 - See Digital consulting
- Suppressing message display, (S) *Sys Mgr Tuning*, 14-12
- Surface_Plot graph, (P) *File Appl*, 4-11, A-2
- Surveillance guidelines, (S) *Security*, 6-8
- Suspended processes, (S) *Alpha Perform*, 6-12
- Suspended process fix, (S) *DECams*, 4-2
- Suspending a job, (S) *Sys Mgr Essentials*, 13-75
- Suspend Process and Resume Process fix, (S) *DECams*, 4-5
- Suspension, (P) *Concepts*, 3-36, 3-40
 - compared with hibernation, (P) *Concepts*, 3-37
- SVD (Supplementary Volume Descriptor), (S) *Sys Mgmt Util M-Z*, 2-36
- Swap file
 - default data collection, (S) *DECams*, 5-2
- SWAPFILE.SYS file, (S) *Sys Mgr Tuning*, 15-4
- SWAPFILEn_NAME symbol, (S) *Sys Mgr Tuning*, 15-17, 15-24
- SWAPFILEn_SIZE symbol, (S) *Sys Mgr Tuning*, 15-18, 15-24
- Swap files
 - changing size, (S) *Sys Mgmt Util A-L*, 6-3
 - with SWAPFILES.COM, (S) *Sys Mgr Tuning*, 15-25
 - created by CLUSTER_CONFIG.COM procedure, (S) *VMScluster Sys*, 8-1, 8-6
 - creating
 - with AUTOGEN, (S) *Sys Mgr Tuning*, 15-17, 15-24
 - with SYSGEN, (S) *Sys Mgr Tuning*, 15-18
 - definition, (S) *Sys Mgr Tuning*, 15-4
 - deleting after creating a new version, (S) *Sys Mgr Tuning*, 15-28
 - displaying, (S) *Sys Mgr Tuning*, 15-6
 - displaying the size calculated by AUTOGEN, (S) *Sys Mgr Tuning*, 15-17, 15-22; (S) *Sys Mgmt Util A-L*, 6-7
 - fragmentation of, (S) *Sys Mgr Tuning*, 15-27
 - generating a new file sized by AUTOGEN, (S) *Sys Mgmt Util A-L*, 6-7
 - installing
- Swap files
 - installing (cont'd)
 - in system startup, (S) *Sys Mgr Essentials*, 5-5, 5-6; (S) *Sys Mgr Tuning*, 15-5, 15-19, 15-21
 - when resized with AUTOGEN, (S) *Sys Mgr Tuning*, 15-18, 15-22
 - with SYPAGSWPFILES.COM procedure, (S) *Sys Mgr Tuning*, 15-20
 - with SYSGEN, (S) *Sys Mgr Tuning*, 15-19
 - location
 - specifying for individual files, (S) *Sys Mgr Tuning*, 15-24
 - message indicating high fragmentation, (S) *Sys Mgr Tuning*, 15-27
 - monitoring usage of, (S) *Sys Mgr Tuning*, 15-6, 15-10
 - mounting disk during system startup, (S) *Sys Mgr Essentials*, 5-6; (S) *Sys Mgr Tuning*, 15-20
 - moving to improve performance, (S) *Sys Mgr Tuning*, 16-8
 - on a satellite, (S) *Sys Mgr Tuning*, 15-20
 - primary, (S) *Sys Mgr Tuning*, 15-5
 - purging, (S) *Sys Mgr Tuning*, 15-28
 - requirements
 - location, (S) *Sys Mgr Tuning*, 15-5
 - secondary, (S) *Sys Mgr Tuning*, 15-5, 15-20
 - tasks for managing, (S) *Sys Mgr Tuning*, 15-1
 - VMScluster satellite node, (S) *Sys Mgr Essentials*, 5-6
- SWAPFILES.COM command procedure
 - changing size of primary page, swap, and dump files, (S) *Sys Mgr Tuning*, 15-25
- Swap file sizes
 - calculating
 - manually, (S) *Sys Mgr Tuning*, 15-9
 - with AUTOGEN, (S) *Sys Mgr Tuning*, 15-5
 - changing
 - recommended method, (S) *Sys Mgr Tuning*, 15-22
 - when to increase, (S) *Sys Mgr Tuning*, 15-10
 - with AUTOGEN, (S) *Sys Mgr Tuning*, 15-22
 - with SYSGEN, (S) *Sys Mgr Tuning*, 15-26
 - determining current, (S) *Sys Mgr Tuning*, 15-23
 - displaying AUTOGEN's calculations, (S) *Sys Mgr Tuning*, 15-17, 15-22
 - specifying
 - for individual files, (S) *Sys Mgr Tuning*, 15-22, 15-24
 - total for multiple files, (S) *Sys Mgr Tuning*, 15-22, 15-23
 - when to increase, (S) *Sys Mgr Tuning*, 15-10

- SWAPFILE symbol, (S) *Sys Mgr Tuning*, 15-24
- Swapper, (G) *SW Overview*, 3-2; (S) *Alpha Perform*, 5-4, 6-11
- definition, (S) *Alpha Perform*, 5-1
 - global symbols, (P) *VAX SDA*, SDA-65
 - trimming, (S) *Alpha Perform*, 5-5, 6-11
 - adjusting, (S) *Alpha Perform*, 17-6
 - alternative to swapping, (S) *Alpha Perform*, 10-6
 - analyzing when ineffective, (S) *Alpha Perform*, 13-11
 - disabling, (S) *Alpha Perform*, 6-13
 - dormant processes, (S) *Alpha Perform*, 6-12
 - first-level, (S) *Alpha Perform*, 6-12
 - investigating, (S) *Alpha Perform*, 13-7
 - memory reclamation, (S) *Alpha Perform*, 17-9
 - second-level, (S) *Alpha Perform*, 6-12
 - suspended processes, (S) *Alpha Perform*, 6-12
- SWAPPER process
- fixes ignored, (S) *DECams*, 4-2
- Swapper trimming
- adjusting, (S) *VAX Perform*, 5-7
 - alternative to swapping, (S) *VAX Perform*, 3-25
 - analyzing when ineffective, (S) *VAX Perform*, 4-21
 - investigating, (S) *VAX Perform*, 4-13
 - memory reclamation, (S) *VAX Perform*, 5-10
 - overview, (S) *VAX Perform*, 2-16
- Swapping, (S) *Alpha Perform*, 5-4, 5-5
- artificially induced, (S) *VAX Perform*, 3-25; (S) *Alpha Perform*, 10-6
 - by suspension, (P) *Concepts*, 3-40
 - converting to system that rarely swaps, (S) *VAX Perform*, 5-8; (S) *Alpha Perform*, 17-7
 - effect on CPU resource, (S) *VAX Perform*, 3-25; (S) *Alpha Perform*, 10-6
 - effect on disk subsystem, (S) *VAX Perform*, 3-25; (S) *Alpha Perform*, 10-6
 - enabling for disk ACPs, (S) *VAX Perform*, 5-9; (S) *Alpha Perform*, 17-8
 - files, (S) *Alpha Perform*, 5-2, 6-15
 - for created processes, (G) *DCL N-Z*, DCLII-62
 - I/O activity, (S) *VAX Perform*, 3-35; (S) *Alpha Perform*, 11-7
 - inducing paging to reduce, (S) *VAX Perform*, 5-10; (S) *Alpha Perform*, 17-9
 - long waiting processes, (S) *VAX Perform*, 2-20
 - processes
 - enabling or disabling swap mode, (G) *DCL N-Z*, DCLII-187
 - symptoms, (S) *VAX Perform*, 4-14, 4-15, 4-20, 4-29
 - analyzing, (S) *Alpha Perform*, 13-8
 - diagnosing, (S) *Alpha Perform*, 13-8
- Swapping
- symptoms (cont'd)
 - for disks, (S) *Alpha Perform*, 14-4
 - for large waiting process, (S) *Alpha Perform*, 13-10
 - harmful, (S) *Alpha Perform*, 13-8
 - to move information between physical memory and files stored on disk, (S) *Sys Mgr Tuning*, 15-4
- Switchhook character (%)
- in Phone, (G) *User*, 7-3
- Switching of terminal lines
- automatic, (S) *DECnet Intro*, 3-27
 - manual, (S) *DECnet Intro*, 3-27
- SWPOUTPGCNT system parameter
- swapping and swapper trimming, (S) *VAX Perform*, 3-25, 3-29; (S) *Alpha Perform*, 10-6, 10-11
- SYCONFIG.COM command procedure, (S) *Sys Mgr Essentials*, 5-3
- AUTOGEN failure, (S) *Sys Mgr Essentials*, 7-9
- configuring devices, (S) *Sys Mgr Essentials*, 7-6
- in startup, (S) *Sys Mgr Essentials*, 5-4
 - modifying to connect special devices, (S) *Sys Mgr Essentials*, 5-7
 - modifying to mount disks early, (S) *Sys Mgr Essentials*, 5-12
- STARTUP\$AUTOCONFIGURE_ALL symbol, (S) *Sys Mgr Essentials*, 7-8
- SYLOGICALS.COM command procedure, (S) *Sys Mgr Essentials*, 5-3, 5-8
- in system startup, (S) *Sys Mgr Essentials*, 5-5
 - mounting the queue database disk, (S) *Sys Mgr Essentials*, 12-6
 - redefining location of master file of queue database, (S) *Sys Mgr Essentials*, 12-6
 - redefining location of system files, (S) *Sys Mgr Tuning*, 16-8
 - to specify default state of operator log files, (S) *Sys Mgr Tuning*, 18-23
- SYLOGIN.COM command procedure, (G) *User*, 18-10; (S) *Sys Mgr Essentials*, 5-16, 6-20
- ensuring execution, (S) *Sys Mgr Essentials*, 6-13
 - sample systemwide, (S) *Sys Mgr Essentials*, 6-20
- SYLOGOUT.COM command procedure, (S) *Sys Mgr Essentials*, 6-22
- Symbiont/Job Controller Interface routines
- See SMB routines
- Symbionts, (S) *Sys Mgr Essentials*, 13-53
- See also Queues
 - active stream, (P) *Util Routines*, PSM-3
 - allocating memory, (P) *Util Routines*, SMB-4
 - bypass formatting, (S) *Sys Mgr Essentials*, 13-44

Symbionts (cont'd)

- carriage control, processing of, (P) *Util Routines*, PSM-11
- communicating with, (S) *Sys Mgr Essentials*, 13-75
- connecting to a device, (P) *Util Routines*, SMB-4
- customer-written, (G) *DCL A-M*, DCLI-260
- default, (G) *DCL A-M*, DCLI-260; (S) *Sys Mgr Essentials*, 13-3
- demand input routines, (P) *Util Routines*, PSM-6
- determining, (S) *Sys Mgr Essentials*, 13-78
- device, (P) *Util Routines*, PSM-2
- environments, (P) *Util Routines*, SMB-5
- for LAT printers, (S) *Sys Mgr Essentials*, 13-3, 13-78
- function of, (S) *Sys Mgr Essentials*, 12-3, 13-2; (P) *Util Routines*, PSM-4, SMB-2
- input, (P) *Util Routines*, PSM-2, SMB-1
- INPSMB.EXE file, (P) *Util Routines*, SMB-1
- internal logic, (P) *Util Routines*, PSM-5
 - main format routine, (P) *Util Routines*, PSM-13
 - main input routine, (P) *Util Routines*, PSM-10
 - main output routine, (P) *Util Routines*, PSM-14
- invoking, (P) *Util Routines*, PSM-22
- job controller, communication with, (P) *Util Routines*, SMB-1
- job controller requests, (P) *Util Routines*, SMB-5
 - asynchronous, (P) *Util Routines*, SMB-6
 - processing, (P) *Util Routines*, SMB-10
 - reading, (P) *Util Routines*, SMB-7
 - responding, (P) *Util Routines*, SMB-13
 - synchronous, (P) *Util Routines*, SMB-5
- LATSYM, (S) *Sys Mgr Essentials*, 13-3, 13-78
- modifying, (P) *Util Routines*, PSM-1, PSM-7, SMB-3
 - format routine, (P) *Util Routines*, PSM-12
 - guidelines, (P) *Util Routines*, PSM-8
 - initialization routine, (P) *Util Routines*, PSM-15
 - input routine, (P) *Util Routines*, PSM-10
 - integration of routines, (P) *Util Routines*, PSM-16
 - output routine, (P) *Util Routines*, PSM-13
 - restrictions, (P) *Util Routines*, PSM-8
- multiple streams, (P) *Util Routines*, PSM-3, SMB-7
- multithreaded, (P) *Util Routines*, PSM-3
- output, (P) *Util Routines*, PSM-2, SMB-1
 - PRTSMB.EXE file, (P) *Util Routines*, SMB-1
- printer, (P) *Util Routines*, SMB-1

Symbionts (cont'd)

- processing, (P) *Util Routines*, PSM-1
- process-permanent file, (P) *Util Routines*, SMB-4
- PRTSMB on LAT printers, (S) *Sys Mgr Essentials*, 13-78
- role in processing print jobs, (S) *Sys Mgr Essentials*, 13-3
- server, (P) *Util Routines*, PSM-2, SMB-1
- single stream, (P) *Util Routines*, PSM-3, SMB-7
- special purpose, (G) *DCL A-M*, DCLI-260
- system MAXBUF parameter, (P) *Util Routines*, PSM-7
- type, (P) *Util Routines*, SMB-1
- user-written, (S) *Sys Mgr Essentials*, 13-3; (P) *Util Routines*, PSM-1, SMB-1, SMB-3
- user-written guidelines, (P) *Util Routines*, SMB-4
- user-written interfaces, (P) *Util Routines*, PSM-7
- Symbiont thread, (P) *Util Routines*, PSM-3
- SYMBOL= option, (P) *Linker*, LINK-63
- Symbol definition macros
 - description, (P) *RMS Ref*, A-1
 - using, (P) *RMS Ref*, A-7
- Symbol definitions, (P) *Modular Proc*, A-4
- Symbolic addresses
 - use in locating start of control block, (P) *RMS Ref*, A-6
- Symbolic bit offsets
 - use in specifying options, (P) *RMS Ref*, 2-3
- Symbolic codes
 - for condition values, (P) *Interfaces*, 4-8
- Symbolic mode, (P) *Debugger*, 8-13
- Symbolic names
 - defining, (G) *DCL A-M*, DCLI-5
- Symbolic naming exceptions
 - control block, (P) *RMS Ref*, 2-3
- Symbolic offsets
 - control block, (P) *RMS Ref*, 2-3
 - format, (P) *RMS Ref*, 2-2
 - use in locating control block fields, (P) *RMS Ref*, 2-2
- /SYMBOLIC qualifier, (P) *Debugger*, 8-13
- SYMBOLIZE command, (P) *Debugger*, 7-8, 8-13
- Symbolizing
 - address, (P) *Debugger*, 7-8, 8-13
 - register, (P) *Debugger*, 8-13
 - vector register, (P) *Debugger*, 15-1
- Symbol resolution processing
 - definition, (P) *Linker*, 1-2
 - description, (P) *Linker*, 2-2
 - handling undefined symbols, (P) *Linker*, 2-5
 - of object modules, (P) *Linker*, 2-6
 - ordering of input files, (P) *Linker*, 2-15
 - overview, (P) *Linker*, 2-1
 - performed by linker, (P) *Linker*, 1-2

Symbol resolution processing (cont'd)

- processing default libraries, (P) *Linker*, 2-13
 - processing files selectively, (P) *Linker*, 2-14
 - specifying selective processing, (P) *Linker*, LINK-28
 - types of input files included, (P) *Linker*, 2-5
- Symbols, (P) *VAX SDA*, SDA-17 to SDA-19
- See also Global symbols, Local symbols, Logical names, Universal symbols, and Symbol resolution processing
- abbreviating, (G) *User*, 14-4
 - ambiguity, resolving, (P) *Debugger*, 9-7
 - ampersand (&), (G) *User*, 14-32 to 14-33
 - and arithmetic operations, (G) *User*, 14-15, 14-16
 - and character strings, (G) *User*, 14-8
 - and expressions, (G) *User*, 14-8
 - and numeric expressions, (G) *User*, 14-15
 - apostrophe ('), (G) *User*, 14-31
 - as DCL command, (G) *User*, 14-4
 - as foreign commands, (G) *User*, 14-5
 - assigning value with READ command, (G) *DCL N-Z*, DCLII-30
 - asterisk (*), (G) *User*, 14-4
 - binary overlay in, (G) *DCL A-M*, DCLI-1
 - built-in, (P) *Debugger*, 6-2, B-3
 - character overlays in, (G) *DCL A-M*, DCLI-6
 - character string expressions, (G) *User*, 14-9, 14-10
 - character string operations, (G) *User*, 14-10
 - compared to logical names, (G) *User*, 14-2
 - comparing numbers, (G) *User*, 14-16, 14-17
 - compiler generated type, (P) *Debugger*, 8-4
 - concatenating, (G) *User*, 14-7
 - creating with assignment statement, (G) *User*, 14-3
 - cross-referenced in image map file, (P) *Linker*, 5-8
 - declaring universal symbols on Alpha systems, (P) *Linker*, 4-8
 - declaring universal symbols on VAX systems, (P) *Linker*, 4-2
 - defining, (G) *User*, 14-3; (P) *Concepts*, 17-3; (P) *Debugger*, 12-6
 - as a symbol, (G) *User*, 14-6
 - as lexical functions, (G) *User*, 14-21, 14-22
 - character strings, (G) *User*, 14-9
 - defining character strings, (G) *User*, 14-9
 - defining for SDA, (P) *Alpha SDA*, SDA-40; (P) *VAX SDA*, SDA-48
 - defining in MODPARAMS.DAT file, (S) *Sys Mgr Tuning*, 14-19, 15-17
 - defining shared information, (S) *Dependable*, 8-60
 - definition, (G) *User*, 14-1
 - definition macros, (P) *Interfaces*, A-4
 - deleting, (G) *User*, 14-6

Symbols

deleting (cont'd)

- from global symbol tables, (G) *DCL A-M*, DCLI-145
 - from local symbol tables, (G) *DCL A-M*, DCLI-145
- displaying, (G) *DCL N-Z*, DCLII-334; (P) *Debugger*, 9-8, 12-6
- displaying values, (G) *User*, 14-6
- evaluating, (G) *User*, 14-24; (P) *Alpha SDA*, SDA-157; (P) *VAX SDA*, SDA-181
- finding in memory location, (P) *VAX SDA*, SDA-27
- for argument lists, (P) *Interfaces*, A-4
- for page, swap, and dump file sizes, (S) *Sys Mgr Tuning*, 15-23 to 15-25
- for system parameters, (S) *Sys Mgr Tuning*, 14-19
- general assignment, (G) *DCL A-M*, DCLI-1
- global, (G) *User*, 14-3, 14-4; (P) *Linker*, 2-1
- determining the address of, (P) *Linker*, 3-18
- identifying with F\$TYPE lexical function, (G) *User*, 17-18
- image setting, (P) *Debugger*, 9-13
- implemented as overlaid program sections, (P) *Linker*, 2-1
- indicating numeric values, (G) *User*, 14-14, 14-24
- in string assignments, (G) *User*, 14-7
- interactive assignment in command procedures, (G) *DCL A-M*, DCLI-273
- label, (P) *Debugger*, 7-6, 9-1
- line number, (P) *Debugger*, 7-7, 9-1
- listed by name in image map file, (P) *Linker*, 5-8
- listed by value in image map file, (P) *Linker*, 5-9
- listing, (P) *Alpha SDA*, SDA-157; (P) *VAX SDA*, SDA-181
- loading into the SDA symbol table, (P) *Alpha SDA*, SDA-60; (P) *VAX SDA*, SDA-63
- local, (G) *User*, 14-3; (P) *Linker*, 2-1; (P) *Debugger*, 3-21
- logical data, (G) *User*, 14-18, 14-19
- masking, (G) *DCL N-Z*, DCLII-213
- module setting, (P) *Debugger*, 9-5
- name, (P) *Alpha SDA*, SDA-40; (P) *VAX SDA*, SDA-17, SDA-48
- not in symbol table, (P) *Debugger*, 9-5, 9-14
- not unique, (P) *Debugger*, 3-23, 9-8
- numeric overlays, (G) *User*, 14-18
- NUM_ETHERADAPT, (S) *Sys Mgr Tuning*, 14-21
- NUM_NODES, (S) *Sys Mgr Tuning*, 14-21
- overloaded, (P) *Debugger*, 16-28
- PAGEFILEn_NAME, (S) *Sys Mgr Tuning*, 15-17

Symbols (cont'd)

PAGEFILEn_SIZE, (S) *Sys Mgr Tuning*, 15-18
referring to, (P) *Concepts*, 17-3
relation to address expression, (P) *Debugger*, 8-4
relation to path name, (P) *Debugger*, 9-8
representing executive modules, (P) *Alpha SDA*, SDA-97; (P) *VAX SDA*, SDA-111
resolving ambiguities, (P) *Debugger*, 3-23
routine, (P) *Debugger*, 7-6, 9-1
search based on call stack, (P) *Debugger*, 3-22, 3-23, 9-11
search conventions, (P) *Debugger*, 7-7, 9-7
SET SCOPE command, (P) *Debugger*, 9-10
shareable image, (P) *Debugger*, 9-13
SHOW SYMBOL command, (P) *Debugger*, 9-8
STARTUP\$AUTOCONFIGURE_ALL, (S) *Sys Mgr Essentials*, 7-8
STARTUP\$INTERACTIVE_LOGINS, (S) *Sys Mgr Essentials*, 5-16
storage, (P) *Concepts*, 17-3
string assignment, (G) *DCL A-M*, DCLI-5
strong, (P) *Linker*, 2-1, 2-19
strong definition of, (P) *Linker*, 2-20
substitution, (G) *User*, 14-5, 14-29
 automatic, (G) *User*, 14-29
 command input scanning, (G) *User*, 14-34
 command parsing, (G) *User*, 14-34
 expression evaluation, (G) *User*, 14-34
 forced, (G) *User*, 14-30
 iterative, (G) *User*, 14-34
 on data lines, (G) *User*, 14-34
 operators, (G) *User*, 14-31
 order of, (G) *User*, 14-30, 14-31
 phases, (G) *User*, 14-33
 repetitive, (G) *User*, 14-34
 using an Ampersand (&), (G) *User*, 14-32 to 14-33
 using an apostrophe ('), (G) *User*, 14-31, 14-32
SWAPFILEn_NAME, (S) *Sys Mgr Tuning*, 15-17
SWAPFILEn_SIZE, (S) *Sys Mgr Tuning*, 15-18
symbolic mode, (P) *Debugger*, 8-13
symbol resolution processing, (P) *Linker*, 2-2
traceback information, (P) *Debugger*, 9-3
types of, (P) *Linker*, 2-1
types of characters, (G) *User*, 14-8
undefined, (G) *User*, 14-37
universal, (P) *Linker*, 2-1
unresolved, (P) *Concepts*, 17-4
user-defined, (P) *Alpha SDA*, SDA-40; (P) *VAX SDA*, SDA-48
 using as variables, (G) *User*, 14-8
 variable, (P) *Debugger*, 7-11, 8-1, 8-14, 9-1
 vectored symbol definition subrecords, (P) *Linker*, B-26
vector register, (P) *Debugger*, 15-1

Symbols (cont'd)

weak, (P) *Linker*, 2-1, 2-19
weak definition of, (P) *Linker*, 2-20
Symbol scope
 definition, (G) *User*, 14-28
 global, (G) *User*, 14-29
 local, (G) *User*, 14-28
SYMBOLS qualifier
 for SDA EVALUATE command, (P) *VAX SDA*, SDA-53
/SYMBOLS qualifier
 for EVALUATE, (P) *Alpha SDA*, SDA-45
Symbol substitutions
 forcing in character strings, (G) *User*, 16-10
Symbol table files
 as linker input files, (P) *Linker*, 1-10
 controlling the contents of, (P) *Linker*, LINK-64
 creating, (P) *Linker*, 1-14, LINK-32
 naming, (P) *Linker*, LINK-32
 reading into SDA symbol table, (P) *Alpha SDA*, SDA-60; (P) *VAX SDA*, SDA-63
 using with SDA utility, (P) *Linker*, 1-10, LINK-32
Symbol tables, (G) *User*, 14-26
 See also GSTs, Local symbol tables, SDA symbol table, and System symbol table
 command interpreter, (S) *Sys Mgmt Util M-Z*, C-11
 global, (G) *User*, 14-26, 14-27
 \$RESTART symbol, (G) *User*, 14-27
 \$SEVERITY symbol, (G) *User*, 14-27
 \$STATUS symbol, (G) *User*, 14-27
 local, (G) *User*, 14-26
 parameters, (G) *User*, 14-26
 search order, (G) *User*, 14-27
 specifying an alternate SDA, (P) *Alpha SDA*, SDA-34; (P) *VAX SDA*, SDA-40
Symbol vectors
 creating, (P) *Linker*, 4-8, LINK-65
 declaring alias names for universal symbols, (P) *Linker*, 4-11
 declaring universal symbols, (G) *Compatibility*, 4-7
 ensuring upward compatibility on Alpha systems, (P) *Linker*, 4-9
 guidelines, (P) *Linker*, 4-9
 in program section, (P) *Linker*, 3-3
 run-time flow of control, (P) *Linker*, 4-8
SYMBOL_TABLE= option, (P) *Linker*, LINK-64
/SYMBOL_TABLE qualifier, (P) *Linker*, LINK-32
SYMBOL_VECTOR= option, (P) *Linker*, LINK-65
 declaring universal symbols, (P) *Linker*, 4-8
Symmetric multiprocessing
 See SMP and Multiprocessing

- Symmetric vector processing configuration, (S)
 - Sys Mgr Tuning*, 26-4
- /SYMVA qualifier, (P) *Alpha SDA*, SDA-60
- \$SYMVECT program section, (P) *Linker*, 3-3
- Synchronization
 - See also Event synchronization and Parallel processing
 - asynchronous system traps, (P) *Concepts*, 4-1
 - barrier, (P) *Concepts*, 14-28
 - debugging vectorized program, (P) *Debugger*, 15-19
 - definition of, (P) *Concepts*, 14-1
 - delivery of vector exception, (P) *Debugger*, 15-19, 15-22
 - exception, (P) *Calling Std*, 2-8
 - hardware-level, (P) *Concepts*, 14-7
 - memory, (P) *Calling Std*, 2-8
 - mutex, (P) *DECthreads*, pthread-57, cma-50
 - passing control to another image, (P) *Concepts*, 3-40
 - SET VECTOR_MODE command, (P) *Debugger*, 15-19
 - SHOW VECTOR_MODE command, (P)
 - Debugger*, 15-19
 - software-level, (P) *Concepts*, 14-10
 - using detached processes, (P) *Concepts*, 3-31
 - using events flags, (P) *Concepts*, 14-14
 - using PPL\$ routines with spin locks, (P)
 - Concepts*, 14-27
 - using process priority, (P) *Concepts*, 14-11
 - using semaphores with PPL\$ routines, (P)
 - Concepts*, 14-28
 - using spin locks, (P) *Concepts*, 14-13
 - using subprocesses, (P) *Concepts*, 3-31
- Synchronization, asynchronous
 - coding for, (P) *DECthreads*, 3-1
- Synchronization objects
 - atomic queue, (P) *DECthreads*, 2-18
 - condition variable, (P) *DECthreads*, 2-10
 - join, (P) *DECthreads*, 2-14
 - mutex, (P) *DECthreads*, 2-8
- Synchronization techniques, (S) *Dependable*, 8-17
- SYNCHRONIZE command, (G) *User*, 18-19, 18-20; (G) *DCL N-Z*, DCLII-416 to DCLII-417
- SYNCHRONIZE VECTOR_MODE command, (P)
 - Debugger*, 15-19
- Synchronous circuits
 - See Circuits
- Synchronous connections, (S) *DECnet Mgmt*, 1-3
- Synchronous disconnects, (S) *DECnet Mgmt*, 8-10, 8-14, 8-30, 8-36
- Synchronous input/output, (P) *Concepts*, 9-18
- Synchronous lines
 - See Lines
- Synchronous operations, (P) *File Appl*, 8-18
- Synchronous SCSI data transfer mode
 - enabling, (P) *I/O User*, 8-6, 8-12
- Synchronous signals, (P) *DECthreads*, A-6
- Synchronous system services, (P) *Interfaces*, 4-5
- Syntax
 - file specifications on tape volumes, (G) *User*, 4-11
 - for DCL commands, (G) *User*, 3-3
 - for event list identification, (S) *DECnet Mgmt Util*, 1-9
 - node specifications, (G) *User*, 4-6
 - of BACKUP commands, (S) *Sys Mgmt Util A-L*, 7-5
 - of NCP commands, (S) *DECnet Mgmt Util*, 1-2
 - rules for naming NCP components and parameters, (S) *DECnet Mgmt Util*, 1-7 to 1-11
 - VMScluster device specifications, (G) *User*, 12-10
- SYSPAGSWPFILES.COM command procedure, (S)
 - Sys Mgr Essentials*, 5-3; (S) *Sys Mgr Tuning*, 15-19, 15-20
- execution of during system startup, (S) *Sys Mgr Essentials*, 5-5, 5-6
- modifying to install page and swap files, (S)
 - Sys Mgr Essentials*, 5-6
- SYS\$ABORT_TRANS system service, (P)
 - Concepts*, 12-2; (P) *Sys Svc I*, SYS1-3
- SYS\$ABORT_TRANSW system service, (P)
 - Concepts*, 12-2, 12-3; (P) *Sys Svc I*, SYS1-7
- SYS\$ADD HOLDER system service, (P) *Concepts*, 23-12; (P) *Sys Svc I*, SYS1-8
- SYS\$ADD_IDENT system service, (P) *Concepts*, 23-12; (P) *Sys Svc I*, SYS1-11
- SYS\$ADD_PROXY system service
 - on VAX systems only, (P) *Sys Svc I*, SYS1-14
- SYS\$ADJSTK system service, (P) *Sys Svc I*, SYS1-18
- SYS\$ADJWSL system service, (P) *Concepts*, 19-11, 20-11; (P) *Sys Svc I*, SYS1-20
- SYS\$ALLOC system service, (P) *Sys Svc I*, SYS1-22
 - example, (P) *Concepts*, 9-33
- SYS\$ANNOUNCE logical name, (S) *Security*, 7-23; (S) *Sys Mgr Essentials*, 5-14
- SYS\$ASCEFC system service, (P) *Sys Svc I*, SYS1-25
- SYS\$ASCTIM system service, (P) *Concepts*, 5-6; (P) *Sys Svc I*, SYS1-29
 - example, (P) *Concepts*, 5-10
- SYS\$ASCTOID system service, (P) *Concepts*, 23-11; (P) *Sys Svc I*, SYS1-32
- SYS\$ASCUTC system service, (P) *Concepts*, 5-2 to 5-4; (P) *Sys Svc I*, SYS1-35

- SYS\$ASSIGN routine, (P) *I/O User*, 4-1, 5-18, 5-75, 9-4
- SYS\$ASSIGN system service, (S) *DECnet Mgmt*, 5-1, 8-18; (P) *Sys Svc I*, SYS1-38
 example, (P) *Concepts*, 9-11
 format, (S) *DECnet Mgmt*, 8-20, 8-32
 _NET: pseudodevice, (S) *DECnet Mgmt*, 8-32
 nontransparent use of, (S) *DECnet Mgmt*, 8-25
 transparent use of, (S) *DECnet Mgmt*, 8-18
- SYS\$AUDIT_EVENT system service, (P) *Sys Svc I*, SYS1-43
- SYS\$AUDIT_EVENTW system service, (P) *Sys Svc I*, SYS1-61
- SYS\$AUDIT_SERVER_INHIBIT logical name, (S) *Sys Mgr Essentials*, 5-9; (S) *Sys Mgr Tuning*, 18-27
- SYS\$BASE_IMAGE.EXE file
 linking against, (P) *Linker*, 2-18
 order of processing, (P) *Linker*, 2-18, LINK-34
- SYS\$BASE_IMAGE.EXE loadable executive image on Alpha systems
 new name for SYS.EXE, (S) *Comparison*, 2-26
- SYS\$BATCH default queue name, (S) *Sys Mgr Essentials*, 13-5
- SYS\$BINTIM system service, (P) *Concepts*, 5-2 to 5-4, 5-6; (P) *Sys Svc I*, SYS1-62
 for storing time in XABDAT, (P) *RMS Ref*, A-9
- SYS\$BINUTC system service, (P) *Concepts*, 5-2 to 5-4; (P) *Sys Svc I*, SYS1-65
- SYS\$BRKTHRU system service, (P) *Sys Svc I*, SYS1-68
- SYS\$BRKTHRUW system service, (P) *Sys Svc I*, SYS1-76
- SYS\$CALL_HANDL+4 routine
 using, (P) *Calling Std*, 6-20
- SYS\$CANCEL system service, (S) *DECnet Mgmt*, 8-31; (P) *Sys Svc I*, SYS1-77
 example, (P) *Concepts*, 9-26
- SYS\$CANEXH system service, (P) *Sys Svc I*, SYS1-79
- SYS\$CANTIM system service, (P) *Concepts*, 5-13; (P) *Sys Svc I*, SYS1-80
 example, (P) *Concepts*, 5-16
- SYS\$CANWAK system service, (P) *Concepts*, 5-13, 5-17; (P) *Sys Svc I*, SYS1-82
- SYS\$CHECK_ACCESS system service, (P) *Concepts*, 23-25; (P) *Sys Svc I*, SYS1-84
- SYS\$CHECK_FEN system service
 on Alpha systems only, (P) *Sys Svc I*, SYS1-92
- SYS\$CHECK_PRIVILEGE system service, (P) *Sys Svc I*, SYS1-93
- SYS\$CHECK_PRIVILEGEW system service, (P) *Sys Svc I*, SYS1-98
- SYS\$CHKPRO system service, (P) *Concepts*, 23-25; (P) *Sys Svc I*, SYS1-99
- SYS\$CLRCLUEVT system service
 on Alpha systems only, (P) *Sys Svc I*, SYS1-107
- SYS\$CLREF system service, (P) *Concepts*, 14-23; (P) *Sys Svc I*, SYS1-109
- SYS\$CMEXEC system service, (P) *Sys Svc I*, SYS1-110
- SYS\$CMKRNL system service, (P) *Sys Svc I*, SYS1-112
- SYS\$CREATE system service, (P) *Concepts*, 8-10
- SYS\$CREATE_RDB system service, (P) *Concepts*, 23-9; (P) *Sys Svc I*, SYS1-114
- SYS\$CREATE_USER_PROFILE system service, (P) *Sys Svc I*, SYS1-116
- SYS\$CRELNM system service, (P) *Sys Svc I*, SYS1-120
- SYS\$CRELNT system service, (P) *Sys Svc I*, SYS1-126
- SYS\$CREMBX system service, (S) *DECnet Mgmt*, 5-1, 8-25; (P) *Concepts*, 1-6, 2-9, 3-49; (P) *Sys Svc I*, SYS1-132; (P) *I/O User*, 4-1
- SYS\$CREPRC system service, (S) *DECnet Mgmt*, 5-1; (P) *Sys Svc I*, SYS1-139
 example, (P) *Concepts*, 1-9
- SYS\$CRETVA system service, (P) *Concepts*, 19-9, 20-8; (P) *Sys Svc I*, SYS1-153
- SYS\$CRMPSC system service, (P) *Concepts*, 8-4, 8-5; (P) *Sys Svc I*, SYS1-156
- SYS\$DACEFC system service, (P) *Sys Svc I*, SYS1-168
- SYS\$DALLOC system service, (P) *Sys Svc I*, SYS1-170
- SYS\$DASSGN routine, (P) *I/O User*, 4-3, 9-4
- SYS\$DASSGN system service, (S) *DECnet Mgmt*, 8-14, 8-19, 8-23, 8-39; (P) *Concepts*, 8-11; (P) *Sys Svc I*, SYS1-172
 example, (P) *Concepts*, 9-24
- SYS\$DCLAST system service, (P) *Sys Svc I*, SYS1-174
 example, (P) *Concepts*, 4-8
- SYS\$DCLCMH system service, (P) *Sys Svc I*, SYS1-176
- SYS\$DCLEXH system service, (P) *Concepts*, 13-74; (P) *Sys Svc I*, SYS1-179
 example, (P) *Concepts*, 3-43
- SYS\$DECDTM_INHIBIT logical name, (S) *Sys Mgr Tuning*, 25-21
- SYS\$DELETE_INTRUSION system service
 on VAX systems only, (P) *Sys Svc I*, SYS1-181
- SYS\$DELETE_PROXY system service
 on VAX systems only, (P) *Sys Svc I*, SYS1-183
- SYS\$DELLNM system service, (P) *Sys Svc I*, SYS1-186
- SYS\$DELMBX system service, (P) *Sys Svc I*, SYS1-189; (P) *I/O User*, 4-3

- SYS\$DELPRI system service, (P) *Sys Svc I*, SYS1-191
- SYS\$DELTVA system service, (P) *Concepts*, 8-11; (P) *Sys Svc I*, SYS1-193
- SYS\$DEQ system service, (P) *Sys Svc I*, SYS1-195
example, (P) *Concepts*, 15-17
- SYS\$DEVICE_SCAN system service, (P) *Sys Svc I*, SYS1-200
- SYS\$DGBLSC system service, (P) *Sys Svc I*, SYS1-204
- SYS\$DISK
as SDA output, (P) *Alpha SDA*, SDA-71
global read, (P) *Alpha SDA*, SDA-60
- SYS\$DISK logical name, (P) *VAX SDA*, SDA-64
applied to file specification, (P) *File Appl*, 6-2
- SYS\$DISMOU system service, (P) *Concepts*, 9-35; (P) *Sys Svc I*, SYS1-207; (P) *I/O User*, 1-34
- SYS\$DISPLAY_PROXY system service
on VAX systems only, (P) *Sys Svc I*, SYS1-211
- SYS\$DLCEFC system service, (P) *Sys Svc I*, SYS1-217
- SYS\$DNS system service
on VAX systems only, (P) *Sys Svc I*, SYS1-219
- SYS\$DNSW system service
on VAX systems only, (P) *Sys Svc I*, SYS1-246
- SYS\$END_TRANS system service, (P) *Concepts*, 12-2; (P) *Sys Svc I*, SYS1-247
- SYS\$END_TRANSW system service, (P) *Concepts*, 12-2, 12-3; (P) *Sys Svc I*, SYS1-252
- SYS\$ENQ system service, (P) *Sys Svc I*, SYS1-253
example, (P) *Concepts*, 15-9
- SYS\$ENQW system service, (P) *Sys Svc I*, SYS1-264
- SYS\$ERAPAT system service, (P) *Sys Svc I*, SYS1-265
- SYS\$ERROR logical name
in log files, (G) *User*, 18-14
process-permanent files, (G) *User*, 18-14
specifying equivalence name with RUN command, (G) *DCL N-Z*, DCLII-59
- SYS\$ERRORLOG logical name
defining during system startup, (S) *Sys Mgr Essentials*, 5-8
defining to reduce system disk I/O, (S) *Sys Mgr Tuning*, 16-8
- SYS\$ERROR system service, (P) *Concepts*, 13-56
- SYS\$ERROR warning message, (P) *Rec Mgmt Util*, 2-4
- SYS\$EXAMPLES data center evaluation
checklists, (S) *Dependable*, A-1
- SYS\$EXIT system service, (P) *Concepts*, 3-42; (P) *Sys Svc I*, SYS1-268; (P) *Debugger*, 13-16
issuing for specified process, (P) *Sys Svc I*, SYS1-305
- SYS\$EXPREG system service, (P) *Concepts*, 19-8, 20-6; (P) *Sys Svc I*, SYS1-269
example, (P) *Concepts*, 19-8, 20-6
- SYS\$FAOL system service, (P) *Sys Svc I*, SYS1-272
- SYS\$FAO system service, (P) *Concepts*, 5-2 to 5-4, 13-42, 13-50, 13-55; (P) *Sys Svc I*, SYS1-272
example, (P) *Concepts*, 9-38
- SYS\$FILESCAN system service, (P) *Sys Svc I*, SYS1-291; (P) *File Appl*, 5-8
- SYS\$FIND_HELD system service, (P) *Concepts*, 23-13, 23-16; (P) *Sys Svc I*, SYS1-297
- SYS\$FIND HOLDER system service, (P) *Concepts*, 23-13, 23-16; (P) *Sys Svc I*, SYS1-300
- SYS\$FINISH_RDB system service, (P) *Sys Svc I*, SYS1-303
- SYS\$FORCEX system service, (P) *Sys Svc I*, SYS1-305
example, (P) *Concepts*, 3-43
- SYS\$FORMAT_ACL system service, (P) *Concepts*, 23-22; (P) *Sys Svc I*, SYS1-308
- SYS\$FORMAT_AUDIT system service, (P) *Sys Svc I*, SYS1-321
- SYS\$GETDVI routine, (P) *I/O User*, 3-8
disk, (P) *I/O User*, 2-25
LAN drivers, (P) *I/O User*, 9-22
mailbox, (P) *I/O User*, 4-4
SCSI generic class driver, (P) *I/O User*, 8-13
terminal, (P) *I/O User*, 5-20
- SYS\$GETDVI system service, (S) *DECnet Mgmt*, 8-31; (P) *Concepts*, 9-28; (P) *Sys Svc I*, SYS1-325
- SYS\$GETDVIW system service, (P) *Sys Svc I*, SYS1-345
- SYS\$GETJPI system service, (P) *Concepts*, 3-5, 3-8; (P) *Sys Svc I*, SYS1-346
AST in target process, (P) *Concepts*, 3-25
buffer, (P) *Concepts*, 3-23, 3-24
control flags, (P) *Concepts*, 3-25
item list
specifying criteria to select processes
example, (P) *Concepts*, 3-18
item-specific flags, (P) *Concepts*, 3-15
obtaining information about all processes on the local system, (P) *Concepts*, 3-8 to 3-14
obtaining information about one process, (P) *Concepts*, 3-8
obtaining information with wildcard search
example, (P) *Concepts*, 3-13
packing information in buffers, (P) *Concepts*, 3-23, 3-24
searching for processes on all nodes, (P) *Concepts*, 3-20
searching for processes on specific nodes, (P) *Concepts*, 3-20, 3-21

SYS\$GETJPI system service (cont'd)

- searching for selected processes, (P) *Concepts*, 3-14
- specifying buffer size, (P) *Concepts*, 3-23, 3-24
- specifying criteria to select processes
 - example, (P) *Concepts*, 3-19
- swapping processes, (P) *Concepts*, 3-25
- synchronizing calls, (P) *Concepts*, 3-20, 3-21, 3-22
- using item lists, (P) *Concepts*, 3-15, 3-22
- using item list with remote procedures, (P) *Concepts*, 3-22
- using multiple \$PROCESS_SCAN service contexts, (P) *Concepts*, 3-21
- using SYS\$PROCESS_SCAN system service
 - item list to specify selection criteria about processes, (P) *Concepts*, 3-15, 3-18, 3-19
 - item-specific flags to control selection information, (P) *Concepts*, 3-15
 - search, (P) *Concepts*, 3-14
- using wildcard
 - example, (P) *Concepts*, 3-13
- using wildcard as pidadr, (P) *Concepts*, 3-8
- using wildcards, (P) *Concepts*, 3-8 to 3-14
- SYS\$GETJPIW system service, (P) *Sys Svc I*, SYS1-366
- SYS\$GETLKI system service, (P) *Sys Svc I*, SYS1-367
- SYS\$GETLKIW system service, (P) *Sys Svc I*, SYS1-379
- SYS\$GETMSG system service, (P) *Concepts*, 13-50; (P) *Sys Svc I*, SYS1-380
- SYS\$GETQUI system service, (P) *Concepts*, 5-21; (P) *Sys Svc II*, SYS2-3
- SYS\$GETQUIW system service, (P) *Sys Svc II*, SYS2-46
- SYS\$GETSYI system service, (P) *Concepts*, 5-21; (P) *Sys Svc II*, SYS2-47
- SYS\$GETSYIW system service, (P) *Sys Svc II*, SYS2-65
- SYS\$GETTIM system service, (P) *Concepts*, 5-2 to 5-4, 5-10; (P) *Sys Svc II*, SYS2-66
- SYS\$GETTUI system service, (P) *Sys Svc II*, SYS2-67
- SYS\$GETUTC system service, (P) *Concepts*, 5-2 to 5-4; (P) *Sys Svc II*, SYS2-79
- SYS\$GET_ALIGN_FAULT_DATA system service, (P) *Concepts*, 22-10
 - on Alpha systems only, (P) *Sys Svc II*, SYS2-80
- SYS\$GET_ARITH_EXCEPTION system service
 - on Alpha systems only, (P) *Sys Svc II*, SYS2-82
- SYS\$GET_SECURITY system service, (P) *Concepts*, 23-21, 23-22; (P) *Sys Svc II*, SYS2-84

- SYS\$GET_SYS_ALIGN_FAULT_DATA system service, (P) *Concepts*, 22-11
 - on Alpha systems only, (P) *Sys Svc II*, SYS2-92
- SYS\$GOTO_UNWIND system service, (P) *Concepts*, 13-45, 13-49; (P) *Calling Std*, 6-22
 - on Alpha systems only, (P) *Sys Svc II*, SYS2-94
 - unwinding, (P) *Calling Std*, 6-23
- SYS\$GRANTID system service, (P) *Sys Svc II*, SYS2-96
- SYS\$HASH_PASSWORD system service, (P) *Sys Svc II*, SYS2-100
- SYS\$HELP.HLB file, (S) *DECamds*, B-1, B-3
- SYS\$HIBER system service, (P) *Concepts*, 3-37; (P) *Sys Svc II*, SYS2-103
 - See also SYS\$WAKE system service example, (P) *Concepts*, 3-39
- SYS\$IDTOASC system service, (P) *Concepts*, 23-11, 23-16; (P) *Sys Svc II*, SYS2-105
- SYS\$IEEE_SET_FP_CONTROL system service
 - on Alpha systems only, (P) *Sys Svc II*, SYS2-108
- SYS\$INIT_SYS_ALIGN_FAULT_REPORT system service, (P) *Concepts*, 22-11
 - on Alpha systems only, (P) *Sys Svc II*, SYS2-110
- SYS\$INIT_VOL system service, (P) *Concepts*, 9-36; (P) *Sys Svc II*, SYS2-113
 - example, (P) *Concepts*, 9-36
- SYS\$INOUT logical name
 - redefining, (G) *User*, 16-5
- SYS\$INPUT logical name, (G) *User*, 16-7; (S) *Sys Mgr Tuning*, 17-31
 - defining as a separate file, (G) *User*, 16-8
 - process-permanent files, (G) *User*, 18-13
 - redefining, (G) *User*, 16-7
 - specifying equivalence name with RUN command, (G) *DCL N-Z*, DCLII-59
- SYS\$INPUT system service, (P) *Concepts*, 13-56
 - default value, (P) *Concepts*, 7-3
 - redefining value, (P) *Concepts*, 7-3
 - using with LIB\$GET_INPUT routine, (P) *Concepts*, 7-4
 - using with LIB\$PUT_OUTPUT routine, (P) *Concepts*, 7-4
- SYS\$JOURNAL logical name, (S) *Sys Mgr Tuning*, 25-3
- SYS\$LANGUAGE logical, (S) *Sys Mgr Essentials*, 5-48
- SYS\$LAVC_DEFINE_NET_COMPONENT subroutine, (S) *VMScluster Sys*, E-5 to E-6
- SYS\$LAVC_DEFINE_NET_PATH subroutine, (S) *VMScluster Sys*, E-7 to E-9
- SYS\$LAVC_DISABLE_ANALYSIS subroutine, (S) *VMScluster Sys*, E-10 to E-11

- SYS\$LAVC_ENABLE_ANALYSIS subroutine, (S)
 VMScluster Sys, E-10
 SYS\$LAVC_START_BUS.MAR subroutine, (S)
 VMScluster Sys, E-2
 SYS\$LAVC_START_BUS subroutine, (S)
 VMScluster Sys, E-2
 SYS\$LAVC_STOP_BUS.MAR subroutine, (S)
 VMScluster Sys, E-3
 SYS\$LAVC_STOP_BUS subroutine, (S)
 VMScluster Sys, E-4 to E-5
 SYS\$LCKPAG system service, (P) *Concepts*,
 19-12, 20-12; (P) *Sys Svc II*, SYS2-126
 SYS\$LIBRARY:STARLET.MLB library
 as source of RMS macros, (P) *RMS Ref*, A-2
 SYS\$LIBRARY logical name, (P) *Linker*, 1-9,
 2-13
 SYS\$LIBRARY system directory, (S) *VMScluster*
 Sys, 5-5
 SYS\$LKWSET system service, (P) *Concepts*,
 19-12, 20-11; (P) *Sys Svc II*, SYS2-129
 SYS\$LOADABLE_IMAGES:SYS.EXE file
 contents, (P) *Alpha SDA*, SDA-61
 SYS\$LOGIN:NETSERVER.LOG file, (S) *DECnet*
 Mgmt, 2-27, 4-17
 SYS\$LOST directory, (G) *DCL N-Z*, DCLII-146
 SYS\$MANAGER:EVL.LOG file, (S) *DECnet*
 Mgmt, 3-65
 SYS\$MANAGER:NET.LOG file, (S) *DECnet*
 Mgmt, 3-74
 SYS\$MANAGER:NETCONFIG.COM command
 procedure, (S) *DECnet Mgmt*, 5-5
 SYS\$MANAGER:RTTLOAD.COM command
 procedure, (S) *DECnet Mgmt*, 6-2
 SYS\$MANAGER:STARTNET.COM command
 procedure, (S) *DECnet Mgmt*, 5-7, 5-20, 6-2
 SYS\$MANAGER:SYSTARTUP_VMS.COM
 command procedure
 invoking SDA, (P) *VAX SDA*, SDA-7
 producing an SDA listing, (P) *VAX SDA*,
 SDA-7
 releasing page file blocks, (P) *VAX SDA*, SDA-5
 SYS\$MANAGER system directory, (S)
 VMScluster Sys, 5-5
 SYS\$MGBLSC system service, (P) *Concepts*, 17-8;
 (P) *Sys Svc II*, SYS2-132
 SYS\$MOD HOLDER system service, (P)
 Concepts, 23-14; (P) *Sys Svc II*, SYS2-138
 SYS\$MOD_IDENT system service, (P) *Concepts*,
 23-13; (P) *Sys Svc II*, SYS2-141
 SYS\$MONITOR logical name
 defining during system startup, (S) *Sys Mgr*
 Essentials, 5-8
 defining to reduce system disk I/O, (S) *Sys Mgr*
 Tuning, 16-8
 SYS\$MOUNT system service, (P) *Concepts*, 9-34;
 (P) *Sys Svc II*, SYS2-145
 SYS\$MTACCESS system service, (P) *Sys Svc II*,
 SYS2-160
 SYS\$NET logical name, (S) *DECnet Mgmt*, 8-12,
 8-18, 8-29
 SYS\$NODE logical name, (S) *Security*, 7-24
 SYS\$NUMTIM system service, (P) *Concepts*, 5-2
 to 5-4, 5-7; (P) *Sys Svc II*, SYS2-163
 SYS\$NUMUTC system service, (P) *Concepts*, 5-2
 to 5-4; (P) *Sys Svc II*, SYS2-165
 SYS\$NXTVOL system service
 See Next Volume service
 SYS\$OPEN system service, (P) *Concepts*, 8-10
 SYS\$OUTPUT logical name, (S) *Sys Mgr Tuning*,
 17-33
 for check report, (P) *File Appl*, 10-1
 in log files, (G) *User*, 18-14
 process-permanent files, (G) *User*, 18-14
 specifying equivalence name with RUN
 command, (G) *DCL N-Z*, DCLII-60
 used for terminal display, (G) *DCL N-Z*,
 DCLII-418
 using with Convert utility, (P) *Rec Mgmt Util*,
 2-7
 SYS\$OUTPUT system service
 default value, (P) *Concepts*, 7-3
 redefining value, (P) *Concepts*, 7-3
 using with LIB\$GET_INPUT routine, (P)
 Concepts, 7-4
 using with LIB\$PUT_OUTPUT routine, (P)
 Concepts, 7-4
 SYS\$OUTPUT_HELP routine, (P) *Util Routines*,
 LBR-8
 SYS\$PARSE_ACL system service, (P) *Concepts*,
 23-22; (P) *Sys Svc II*, SYS2-167
 SYS\$PERM_DIS_ALIGN_FAULT_REPORT
 system service, (P) *Concepts*, 22-11
 on Alpha systems only, (P) *Sys Svc II*,
 SYS2-170
 SYS\$PERM_REPORT_ALIGN_FAULT system
 service, (P) *Concepts*, 22-11
 on Alpha systems only, (P) *Sys Svc II*,
 SYS2-171
 SYS\$PRINT default queue name, (S) *Sys Mgr*
 Essentials, 13-8
 SYS\$PRINT logical name, (G) *User*, 4-17
 SYS\$PROCESS_SCAN system service, (P)
 Concepts, 3-5, 3-8; (P) *Sys Svc II*, SYS2-173
 searching nodes, (P) *Concepts*, 3-21
 setting up multiple contexts, (P) *Concepts*,
 3-21
 using item lists, (P) *Concepts*, 3-15 to 3-22
 using item list with remote procedures, (P)
 Concepts, 3-22
 using item-specific flags to control selection
 information, (P) *Concepts*, 3-15

SYS\$PROCESS_SCAN system services
 obtaining information about processes on nodes,
 (P) *Concepts*, 3-20 to 3-21
 SYS\$PUBLIC_VECTORS.EXE file
 order of processing, (P) *Linker*, 2-18, LINK-34
 processing, (P) *Linker*, 2-14, LINK-36
 SYS\$PURGWS system service, (P) *Sys Svc II*,
 SYS2-186
 See also \$ADJWSL system service
 SYS\$PUTMSG system service, (P) *Concepts*,
 13-6, 13-42, 13-50, 13-55; (P) *Sys Svc II*,
 SYS2-188
 SYS\$QIO routines
 format for request to SCSI generic class driver,
 (P) *I/O User*, 8-10
 SYS\$QIO system service, (P) *Concepts*, 9-12; (P)
 Sys Svc II, SYS2-195
 example, (P) *Concepts*, 9-12
 for additional processing, (P) *RMS Ref*, 4-16
 interface to audio functions, (P) *I/O User*, 2-19
 IO\$_ACCESS!IO\$_M_ABORT function code, (S)
 DECnet Mgmt, 8-30, 8-34
 IO\$_ACCESS function code, (S) *DECnet Mgmt*,
 8-27, 8-30, 8-32, 8-33
 IO\$_ACPCONTROL function code, (S) *DECnet*
 Mgmt, 8-29, 8-38
 IO\$_DEACCESS!IO\$_M_ABORT function code,
 (S) *DECnet Mgmt*, 8-31, 8-37
 IO\$_DEACCESS!IO\$_M_SYNCH function code,
 (S) *DECnet Mgmt*, 8-36
 IO\$_READVBLK function code, (S) *DECnet*
 Mgmt, 8-22, 8-35
 IO\$_WRITEVBLK!IO\$_M_INTERRUPT function
 code, (S) *DECnet Mgmt*, 8-30, 8-35
 IO\$_WRITEVBLK!IO\$_M_MULTIPLE function
 code, (S) *DECnet Mgmt*, 8-21
 IO\$_WRITEVBLK function code, (S) *DECnet*
 Mgmt, 8-35
 use in RMS I/O operations, (P) *RMS Ref*, 2-8
 SYS\$QIOW system service, (P) *Sys Svc II*,
 SYS2-200
 SYS\$QUEUE_MANAGER.QMAN\$JOURNAL file,
 (S) *VMScLuster Sys*, 7-3
 SYS\$QUEUE_MANAGER.QMAN\$QUEUES file,
 (S) *VMScLuster Sys*, 7-3
 SYS\$QUEUE_MANAGER queue manager, (S)
 Sys Mgr Essentials, 12-4
 SYS\$READEF system service, (P) *Sys Svc II*,
 SYS2-201
 SYS\$RELEASE_VP system service
 on VAX systems only, (P) *Sys Svc II*, SYS2-203
 SYS\$REM_HOLDER system service, (P)
 Concepts, 23-16; (P) *Sys Svc II*, SYS2-204
 SYS\$REM_IDENT system service, (P) *Concepts*,
 23-16; (P) *Sys Svc II*, SYS2-206
 SYS\$RESCHED system service, (P) *Sys Svc II*,
 SYS2-208
 SYS\$RESTORE_VP_EXCEPTION system service
 on VAX systems only, (P) *Sys Svc II*, SYS2-209
 SYS\$RESTORE_VP_STATE system service
 on VAX systems only, (P) *Sys Svc II*, SYS2-211
 SYS\$RESUME system service, (P) *Sys Svc II*,
 SYS2-213
 SYS\$REVOKID system service, (P) *Sys Svc II*,
 SYS2-215
 SYS\$RMDRIVER.EXE file, (S) *DECamds*, B-3
 SYS\$RMSRUNDOWN system service, (P) *Sys Svc*
 II, SYS2-219
 SYS\$SAVE_VP_EXCEPTION system service
 on VAX systems only, (P) *Sys Svc II*, SYS2-221
 SYS\$SCAN_INTRUSION system service
 on VAX systems only, (P) *Sys Svc II*, SYS2-223
 SYS\$SCHDWK system service, (P) *Concepts*,
 5-13, 5-16, 5-17; (P) *Sys Svc II*, SYS2-228
 SYS\$SCHED system service, (P) *Sys Svc II*,
 SYS2-231
 SYS\$SETAST system service, (P) *Sys Svc II*,
 SYS2-236
 SYS\$SETCLUEVT system service
 on Alpha systems only, (P) *Sys Svc II*,
 SYS2-237
 SYS\$SETDDIR system service, (P) *Sys Svc II*,
 SYS2-240; (P) *File Appl*, 6-13
 SYS\$SETDFPROT system service, (P) *Sys Svc II*,
 SYS2-242
 SYS\$SETEF system service, (P) *Concepts*, 14-23;
 (P) *Sys Svc II*, SYS2-244
 SYS\$SETEXV system service, (P) *Concepts*,
 13-24; (P) *Sys Svc II*, SYS2-245
 example, (P) *Concepts*, 13-4
 SYS\$SETIME system service, (P) *Concepts*, 5-11;
 (P) *Sys Svc II*, SYS2-247
 SYS\$SETIMR system service, (P) *Concepts*, 5-13;
 (P) *Sys Svc II*, SYS2-249
 example with ASTs, (P) *Concepts*, 4-2
 SYS\$SETPRA system service, (P) *Sys Svc II*,
 SYS2-252
 SYS\$SETPRI system service, (P) *Sys Svc II*,
 SYS2-254
 SYS\$SETPRN system service, (P) *Sys Svc II*,
 SYS2-258
 SYS\$SETPRT system service, (P) *Sys Svc II*,
 SYS2-259
 SYS\$SETPRV system service, (P) *Sys Svc II*,
 SYS2-262
 SYS\$SETRWM system service, (P) *Concepts*, 9-2;
 (P) *Sys Svc II*, SYS2-267
 SYS\$SETSFM system service
 use in signaling RMS errors, (P) *RMS Ref*, 2-6
 SYS\$SETSHLV system service, (P) *Sys Svc II*,
 SYS2-269

SYS\$SETSTK system service, (P) *Sys Svc II*,
 SYS2-271
 SYS\$SETSWM system service, (P) *Concepts*,
 19-12, 20-12; (P) *Sys Svc II*, SYS2-273
 example, (P) *Concepts*, 19-12, 20-12
 SYS\$SETUAI system service, (P) *Sys Svc II*,
 SYS2-275
 SYS\$SET_RESOURCE_DOMAIN system service,
 (P) *Sys Svc II*, SYS2-287
 SYS\$SET_SECURITY system service, (P)
Concepts, 23-21, 23-22; (P) *Sys Svc II*,
 SYS2-292
 SYS\$SHOW_INTRUSION system service
 on VAX systems only, (P) *Sys Svc II*, SYS2-299
 SYS\$SNDERR system service, (P) *Sys Svc II*,
 SYS2-304
 SYS\$SNDJBC system service, (P) *Sys Svc II*,
 SYS2-305
 SYS\$SNDJBCW system service, (P) *Sys Svc II*,
 SYS2-362
 SYS\$SNDOPR system service, (P) *Sys Svc II*,
 SYS2-363
 SYS\$SPECIFIC directory, (S) *VMScluster Sys*,
 5-5
 SYS\$STARTUP.COM file, (S) *DECams*, B-3
 SYS\$STARTUP logical name, (S) *Sys Mgr*
Essentials, 4-4, 5-2, 5-18
 SYS\$START_ALIGN_FAULT_REPORT system
 service, (P) *Concepts*, 22-10
 on Alpha systems only, (P) *Sys Svc II*,
 SYS2-377
 SYS\$START_TRANS system service, (P)
Concepts, 12-2; (P) *Sys Svc II*, SYS2-380
 SYS\$START_TRANSW system service, (P)
Concepts, 12-2, 12-3; (P) *Sys Svc II*,
 SYS2-384
 SYS\$STOP_ALIGN_FAULT_REPORT system
 service, (P) *Concepts*, 22-10
 on Alpha systems only, (P) *Sys Svc II*,
 SYS2-385
 SYS\$STOP_SYS_ALIGN_FAULT_REPORT system
 service, (P) *Concepts*, 22-11
 on Alpha systems only, (P) *Sys Svc II*,
 SYS2-386
 SYS\$SUBSYSTEM system service, (P) *Sys Svc II*,
 SYS2-387
 SYS\$SUSPND system service, (P) *Sys Svc II*,
 SYS2-389
 SYS\$SYLOGIN logical name, (S) *Sys Mgr*
Essentials, 5-17
 executing, (G) *DCL A-M*, DCLI-410
 SYS\$SYNCH system service, (P) *Concepts*, 9-16,
 9-18; (P) *Sys Svc II*, SYS2-392
 SYS\$SYSROOT logical name, (S) *VMScluster Sys*,
 5-5
 SYS\$SYSTEM:LOGINOUT.EXE file
 using as image to create new processes, (P) *Sys*
Svc I, SYS1-139, SYS1-150
 SYS\$SYSTEM:NETNODE_REMOTE.DAT file, (S)
Sys Mgr Tuning, 21-10
 SYS\$SYSTEM:OPCCRASH.COM command
 procedure
 involvement in writing crash dump, (P) *VAX*
SDA, SDA-7
 SYS\$SYSTEM:PAGEFILE.SYS file, (P) *Alpha*
SDA, SDA-28; (P) *VAX SDA*, SDA-8, SDA-32
 See also System dump files
 as dump file, (P) *Alpha SDA*, SDA-4; (P) *VAX*
SDA, SDA-5
 releasing blocks containing a crash dump,
 (P) *Alpha SDA*, SDA-33; (P) *VAX SDA*,
 SDA-39
 SYS\$SYSTEM:REQSYSDEF.STB file, (P) *VAX*
SDA, SDA-8, SDA-10
 SYS\$SYSTEM:SHUTDOWN.COM command
 procedure
 involvement in writing crash dump, (P) *VAX*
SDA, SDA-7
 SYS\$SYSTEM:STARTUP.COM command
 procedure, (S) *Sys Mgmt Util M-Z*, D-6
 SYS\$SYSTEM:SYS.EXE file, (P) *Alpha SDA*,
 SDA-59; (P) *VAX SDA*, SDA-63
 contents, (P) *Alpha SDA*, SDA-97; (P) *VAX*
SDA, SDA-64, SDA-111
 SYS\$SYSTEM:SYS.STB file, (P) *VAX SDA*,
 SDA-8, SDA-10, SDA-11, SDA-20
 SYS\$SYSTEM:SYSDEF.STB file, (P) *Alpha SDA*,
 SDA-9; (P) *VAX SDA*, SDA-10
 SYS\$SYSTEM:SYSDUMP.DMP file, (P) *Alpha*
SDA, SDA-28; (P) *VAX SDA*, SDA-32
 See also System dump files
 protection, (P) *Alpha SDA*, SDA-6; (P) *VAX*
SDA, SDA-7
 size of, (P) *Alpha SDA*, SDA-4; (P) *VAX SDA*,
 SDA-5
 SYS\$SYSTEM logical name for system directory,
 (S) *VMScluster Sys*, 5-5
 SYS\$TEST logical name, (S) *Sys Mgr Tuning*,
 17-4, 17-11, 17-20
 SYS\$TIMCON system service, (P) *Concepts*, 5-2
 to 5-4; (P) *Sys Svc II*, SYS2-394
 SYS\$TIMEZONE_DIFFERENTIAL logical name,
 (S) *Sys Mgr Essentials*, 5-35
 SYS\$TRNLNM system service, (P) *Sys Svc II*,
 SYS2-396
 SYS\$TRNLOG system service, (S) *DECnet Mgmt*,
 8-13
 SYS\$TSTCLUEVT system service
 on Alpha systems only, (P) *Sys Svc II*,
 SYS2-401
 SYS\$ULKPAG system service, (P) *Concepts*,
 19-12, 20-12; (P) *Sys Svc II*, SYS2-403

- SYS\$ULWSET system service, (P) *Concepts*, 19–12, 20–11; (P) *Sys Svc II*, SYS2–405
- SYS\$UNWIND system service, (P) *Concepts*, 13–45, 13–47, 13–49, 13–64, 13–65, 13–67, 13–71; (P) *Sys Svc II*, SYS2–407
 example, (P) *Concepts*, 13–48
 unwinding, (P) *Calling Std*, 6–19, 6–23
- SYS\$UPDATE logical name
 with VMSINSTAL.COM command procedure, (S) *Sys Mgr Essentials*, 3–9
- SYS\$UPDSEC system service, (P) *Concepts*, 8–11; (P) *Sys Svc II*, SYS2–409
- SYS\$UPDSECW system service, (P) *Sys Svc II*, SYS2–414
- SYS\$VERIFY_PROXY system service
 on VAX systems only, (P) *Sys Svc II*, SYS2–415
- SYS\$WAITFR system service, (P) *Sys Svc II*, SYS2–420
- SYS\$WAKE system service, (P) *Concepts*, 3–37; (P) *Sys Svc II*, SYS2–421
 See also SYS\$HIBER system service
 example, (P) *Concepts*, 3–39
- SYS\$WELCOME logical name, (S) *Security*, 7–24; (S) *Sys Mgr Essentials*, 5–15
- SYS\$WFLAND system service, (P) *Sys Svc II*, SYS2–423
- SYS\$WFLOR system service, (P) *Sys Svc II*, SYS2–425
- SYS.COM command procedure, (G) *User*, C–11
 sample execution, (G) *User*, C–13
- SYS.EXE loadable executive image
 renamed to SYS\$BASE_IMAGE.EXE on Alpha systems, (S) *Comparison*, 2–26
- SYS.STB file
 linking against, (P) *Linker*, 2–18
- SYSALF.DAT database in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6–11; (S) *VMScluster Sys*, 5–13
- SYSAP (system application), (P) *VAX SDA*, SDA–166
- SYSAP protocol, (P) *Alpha SDA*, SDA–144
 definition, (S) *VMScluster Sys*, F–2
 part of SCA architecture, (S) *VMScluster Sys*, F–2
 use of SCS, (S) *VMScluster Sys*, 1–5
- /SYSAP qualifier, (P) *VAX SDA*, SDA–91
- SYSBOOT.EXE image, (S) *Sys Mgr Essentials*, 4–2
 See also Conversational boot
 renaming before rebooting satellite, (S) *VMScluster Sys*, 8–42
- SYSDEVICE.EXE file
 global symbols, (P) *VAX SDA*, SDA–65
- SYSDEVICE.STB file
 global symbols, (P) *Alpha SDA*, SDA–62
- SYSDUMP.DMP file, (S) *Sys Mgr Tuning*, 15–2 to 15–4
 See also System dump files
- SYSECURITY.COM command procedure, (S) *Security*, 9–14; (S) *Sys Mgr Essentials*, 5–3, 5–9
- /SYSEXE qualifier, (P) *Linker*, LINK–34
 linking against the executive image, (P) *Linker*, 2–18
- SYSGBL privilege, (S) *Security*, 5–15, A–16
- SYSGEN (System Generation utility)
 See System Generation utility
- SYSGEN parameters
 See also System parameters
 adjusting page cache size, (S) *Alpha Perform*, 17–2
 changing, (S) *Alpha Perform*, 16–2
- SYSGETSYL.EXE file
 global symbols, (P) *VAX SDA*, SDA–65
- SYSGETSYL.STB file
 global symbols, (P) *Alpha SDA*, SDA–62
- SYSHUTDWN.COM command procedure, (S) *Sys Mgr Essentials*, 4–27
- SYSLCK privilege, (S) *Security*, 5–19, A–16
- SYSLDR_DYN.STB file
 global symbols, (P) *Alpha SDA*, SDA–62
- /SYSLIB qualifier, (P) *Linker*, LINK–36
 effect on default library processing, (P) *Linker*, 2–19
- SYSLICENSE.EXE file
 global symbols, (P) *VAX SDA*, SDA–65
- SYSLICENSE.STB file
 global symbols, (P) *Alpha SDA*, SDA–62
- SYSLOA symbol, (P) *VAX SDA*, SDA–18
- SYSLOST.DIR file, (S) *Sys Mgmt Util A-L*, 3–4
 lost files in, (S) *Sys Mgr Essentials*, 8–57
- SYSMAN (System Management utility)
 See System Management utility
- SYSMAN databases and C2 environments, (S) *Security*, C–4
- SYSMANINI logical name, (S) *Sys Mgr Essentials*, 2–19
 changing file specification, (S) *Sys Mgmt Util M-Z*, 6–4
- SYSMSG.EXE file
 global symbols, (P) *VAX SDA*, SDA–65
- SYSMWCNT parameter, (S) *Alpha Perform*, 6–18
 adjusting to curtail page thrashing, (S) *Alpha Perform*, 10–8
 computation of, (G) *V6.2 New Feat*, 3–14
- SYSMWCNT system parameter
 adjusting to curtail page thrashing, (S) *VAX Perform*, 3–27
- SYSNAM privilege, (S) *Security*, 5–16, A–16; (S) *DECnet Mgmt*, 5–1, 8–29
 modifying system operations, (S) *Security*, 4–5
 overriding access controls, (S) *Security*, 4–12

SYSNAM privilege (cont'd)

- queue management, (S) *Security*, 5-18
- SYSVRV privilege, (S) *Security*, 4-11, 4-28; (S) *DECnet Mgmt*, 5-1; (P) *Concepts*, 9-5
 - as requirement for creating files with different UIC, (P) *RMS Ref*, 13-7
 - as requirement to change permanent database, (S) *DECnet Intro*, 3-33
 - giving rights of system user, (S) *Security*, 4-24; (S) *Sys Mgr Essentials*, 11-8
 - tasks requiring, (S) *Security*, A-17
 - using NETCONFIG.COM, (S) *DECnet Mgmt*, 5-5
 - using NETCONFIG_UPDATE.COM, (S) *DECnet Mgmt*, 5-10
- /SYSSHR qualifier, (P) *Linker*, LINK-37
 - effect on default library processing, (P) *Linker*, 2-19
- SYSTARTUP.COM procedures
 - setting up, (S) *VMScluster Sys*, 5-8
- SYSTARTUP_VMS.COM command procedure, (S) *Security*, 12-15; (S) *Sys Mgr Essentials*, 5-3 to 5-17
 - freeing page file of dump information, (S) *Sys Mgr Tuning*, 15-4, 15-17
 - installing known images, (S) *Sys Mgr Tuning*, 16-10
 - invoking the System Dump Analyzer utility, (S) *Sys Mgr Tuning*, 15-15
 - making remote InfoServer disks available, (S) *Sys Mgr Tuning*, 23-14
 - message indicating execution of, (S) *Sys Mgr Essentials*, 4-5
 - modifying, (S) *Sys Mgr Essentials*, 5-10
 - operations performed in, (S) *Sys Mgr Essentials*, 5-10
 - saving contents of system dump file in, (S) *Sys Mgr Tuning*, 15-15
 - setting printer device characteristics, (S) *Sys Mgr Essentials*, 7-13
 - setting terminal device characteristics, (S) *Sys Mgr Essentials*, 7-10
 - starting InfoServer Client for OpenVMS, (S) *Sys Mgr Essentials*, 5-13; (S) *Sys Mgr Tuning*, 23-10

System

- disk, (S) *Alpha Perform*, 4-3
- fault rate, (S) *Alpha Perform*, 10-5
- fix, (S) *DECamds*, 4-1
- libraries
 - decompressing, (S) *Alpha Perform*, 4-1
- load recommendations for hardware, (S) *DECamds*, 5-17
- parameters
 - adjusting, (S) *Alpha Perform*, 3-3
 - changing, (S) *Alpha Perform*, 16-2
- parameter settings required for installation, (S) *DECamds*, A-3

System (cont'd)

- processes, (S) *DECamds*, 4-6
- process header, (S) *Alpha Perform*, 6-18
- requirements, (S) *DECamds*, 1-3 to 1-10, A-2
- resource
 - definition, (S) *Alpha Perform*, 1-1
- SYSTEM account
 - changing passwords for security of, (S) *Sys Mgr Essentials*, 2-9
 - exercising caution with privileges, (S) *Sys Mgr Essentials*, 2-9
 - initial modification, (S) *Sys Mgr Essentials*, 6-9
 - in UAF, (S) *Sys Mgr Essentials*, 6-6, 6-7
 - logging in to, (S) *Sys Mgr Essentials*, 2-10
 - setting process quotas for efficient backups, (S) *Sys Mgr Essentials*, 10-9
 - using AUTHORIZE to modify process limits, (S) *Sys Mgr Essentials*, 3-7
- System alignment fault reporting
 - disabling for user image, (P) *Sys Svc II*, SYS2-386
- System applications
 - See SYSAP protocol
- System blocks
 - See SBs
- SYSTEM class record
 - in Monitor utility, (S) *Sys Mgmt Util M-Z*, A-40
- System command procedures
 - coordinating, (S) *VMScluster Sys*, 5-7
- System Communications Architecture, (G) *SW Overview*, 1-8
 - See SCA architecture
- System Communications Services
 - See SCS
- System configurations, (S) *VMScluster Sys*, 6-23
 - See also Configurations
- System console
 - ? message, (S) *Sys Mgr Essentials*, 4-16
- System console terminal, (P) *I/O User*, 5-1
- System control block base register, (P) *Alpha SDA*, SDA-16
- System crash
 - See Crash dumps and System failures
- System default extension quantity, (P) *File Appl*, 3-5, 3-7
- System defaults, (P) *Rec Mgmt Util*, 4-29
- System-defined identifiers
 - See Environmental identifiers
- System-dependent field, (P) *File Appl*, 1-31
- System directories, (S) *VMScluster Sys*, 5-5
 - restoring original names
 - before upgrading, (S) *Sys Mgr Essentials*, 3-5

System directory structure, (S) *Comparison*, 2-1
System directory table, (P) *Concepts*, 10-3

System disks

adding an alternate root directory, (S) *Sys Mgr Essentials*, 2-31
automatic mounting of, (S) *Sys Mgr Essentials*, 5-11
avoiding rebuilds, (S) *VMScluster Sys*, 9-14
backing up, (S) *Sys Mgr Essentials*, 5-49, 10-48, 10-55, 10-59
backing up after installation, (S) *Sys Mgr Essentials*, 3-13
backing up for software installations, (S) *Sys Mgr Essentials*, 3-7
booting from an alternate, (S) *Sys Mgr Essentials*, 4-3
building with VMSKITBLD, (S) *Sys Mgr Essentials*, 2-27
completing a disk created with VMSKITBLD, (S) *Sys Mgr Essentials*, 2-29
configuring a system root added with VMSKITBLD, (S) *Sys Mgr Essentials*, 2-32
configuring in large cluster, (S) *VMScluster Sys*, 9-14, 9-15
configuring multiple, (S) *VMScluster Sys*, 9-16
controlling dump files, (S) *VMScluster Sys*, 9-17
copying system files from, (S) *Sys Mgr Essentials*, 2-26
copying system files using VMSKITBLD, (S) *Sys Mgr Essentials*, 2-29
creating duplicate, (S) *VMScluster Sys*, 8-31
directory structure on common, (S) *VMScluster Sys*, 5-4
disk space needed to run UETP, (S) *Sys Mgr Tuning*, 17-5
fragmentation of, (S) *Sys Mgr Tuning*, 15-27
installing software on alternate, (S) *Sys Mgr Essentials*, 3-18
moving files off to improve system performance, (S) *Sys Mgr Tuning*, 16-8
moving high-activity files, (S) *VMScluster Sys*, 9-15
moving page and swap files off, (S) *Sys Mgr Tuning*, 15-5
not in volume sets, (S) *Sys Mgr Essentials*, 8-31
quotas for, (S) *Sys Mgr Essentials*, 8-50
rebuilding, (S) *VMScluster Sys*, 6-21
restoring, (S) *Sys Mgr Essentials*, 10-57
saving space by removing optional files, (S) *Sys Mgr Essentials*, 5-1
saving space on, (S) *Sys Mgr Tuning*, 15-5
shadowing across a VMScluster, (S) *VMScluster Sys*, 6-25
test error during UETP, (S) *Sys Mgr Tuning*, 17-24, 17-25

System disks (cont'd)

testing with UETP, (S) *Sys Mgr Tuning*, 17-33
UETP test image, (S) *Sys Mgr Tuning*, 17-34
System Dump Analyzer utility (SDA), (G) *SW Overview*, 4-9; (S) *VMScluster Sys*, 1-10; (P) *Environment*, 9-9 to 9-10
analyzing dump files, (P) *Environment*, 9-9
analyzing the system dump file, (S) *Sys Mgr Tuning*, 15-2
in system startup, (S) *Sys Mgr Essentials*, 5-13; (S) *Sys Mgr Tuning*, 15-4, 15-11
command format, (P) *Alpha SDA*, SDA-11 to SDA-30; (P) *VAX SDA*, SDA-15 to SDA-35
commands, (P) *Alpha SDA*, SDA-1 to SDA-2, SDA-36 to SDA-161; (P) *VAX SDA*, SDA-1 to SDA-3, SDA-42 to SDA-186
conserving dump file storage space, (S) *Comparison*, 3-8
context, (P) *Alpha SDA*, SDA-9, SDA-10 to SDA-11; (P) *VAX SDA*, SDA-11, SDA-12 to SDA-14
COPY command, (S) *Sys Mgr Tuning*, 15-15
determining cause of system failure, (S) *Sys Mgr Tuning*, 15-11
differences, (G) *Compatibility*, 1-11
exiting, (P) *Alpha SDA*, SDA-31, SDA-52; (P) *VAX SDA*, SDA-35, SDA-59
expressions, (P) *Alpha SDA*, SDA-12 to SDA-19
freeing dump information from the page file, (S) *Sys Mgr Tuning*, 15-16
initialization file, (P) *Alpha SDA*, SDA-9; (P) *VAX SDA*, SDA-10
logging a session, (P) *Alpha SDA*, SDA-70; (P) *VAX SDA*, SDA-75
monitoring PEDRIVER, (S) *VMScluster Sys*, F-13
multiple screen displays, (P) *Alpha SDA*, SDA-52; (P) *VAX SDA*, SDA-59
obtaining help, (P) *Alpha SDA*, SDA-55; (P) *VAX SDA*, SDA-62
OpenVMS Alpha, (G) *Compatibility*, 4-11
recording output, (P) *Alpha SDA*, SDA-30, SDA-71; (P) *VAX SDA*, SDA-35, SDA-76
saving contents of system dump file, (S) *Sys Mgr Tuning*, 15-15
SHOW POOL command, (G) *Compatibility*, 1-5
specifying an alternate system symbol table, (P) *Alpha SDA*, SDA-34; (P) *VAX SDA*, SDA-40
system dump file size requirement on Alpha and VAX systems, (S) *Comparison*, 3-7
usage summary, (P) *Alpha SDA*, SDA-30; (P) *VAX SDA*, SDA-35
using with symbol table files, (P) *Linker*, 1-10, LINK-32

System dump files, (P) *Alpha SDA*, SDA-2 to SDA-5; (P) *VAX SDA*, SDA-4 to SDA-6
analyzing, (G) *Compatibility*, 4-11; (S) *Sys Mgr Tuning*, 15-11; (P) *Environment*, 9-9;
(P) *Alpha SDA*, SDA-30; (P) *VAX SDA*, SDA-35
calculating size, (S) *Sys Mgr Tuning*, 15-6
changing sizes
with SWAPFILES.COM, (S) *Sys Mgr Tuning*, 15-25
comparison of contents of physical and selective dumps, (S) *Sys Mgr Tuning*, 15-3, 15-10
conserving storage space, (S) *Comparison*, 3-8
controlling size, (S) *VMScluster Sys*, 10-13
copying the contents, (P) *Alpha SDA*, SDA-39;
(P) *VAX SDA*, SDA-47
copying with BACKUP, (S) *Sys Mgr Tuning*, 15-4, 15-14
default location, (S) *Sys Mgr Tuning*, 15-2
definition, (S) *Sys Mgr Tuning*, 15-2
deleting after creating a new version, (S) *Sys Mgr Tuning*, 15-28
displaying a summary of, (P) *Alpha SDA*, SDA-166
displaying machine check information, (P) *Alpha SDA*, SDA-172
displaying memory with CLUE MEMORY, (P) *Alpha SDA*, SDA-173
displaying process information, (P) *Alpha SDA*, SDA-180
displaying the current stack, (P) *Alpha SDA*, SDA-182
displaying the size calculated by AUTOGEN, (S) *Sys Mgr Tuning*, 15-17, 15-22
displaying virtual I/O cache, (P) *Alpha SDA*, SDA-186
displaying XQP information, (P) *Alpha SDA*, SDA-188
extracting errorlog buffers, (P) *Alpha SDA*, SDA-169
freeing page file, (S) *Sys Mgr Tuning*, 15-4
header, (P) *VAX SDA*, SDA-7
information captured in, (S) *Sys Mgr Tuning*, 15-2
in large clusters, (S) *VMScluster Sys*, 9-17
installing
automatically, (S) *Sys Mgr Tuning*, 15-2
when resized with AUTOGEN, (S) *Sys Mgr Tuning*, 15-18, 15-22
investigating cause of system failure, (S) *Sys Mgr Tuning*, 15-11
lack of, (S) *Sys Mgr Tuning*, 15-2
managing, (S) *VMScluster Sys*, 10-13
mapping physical memory to, (P) *Alpha SDA*, SDA-8; (P) *VAX SDA*, SDA-9
off the system disk, (G) *Compatibility*, 1-8
overwriting of, (S) *Sys Mgr Tuning*, 15-2

System dump files (cont'd)
protecting with UIC security, (S) *Sys Mgr Tuning*, 15-4
purging files using CLUE CLEANUP, (P) *Alpha SDA*, SDA-163
requirements, (S) *Sys Mgr Tuning*, 15-3
location, (S) *Sys Mgr Tuning*, 15-3
size, (S) *Sys Mgr Tuning*, 15-4
requirements for analysis, (P) *Alpha SDA*, SDA-7; (P) *VAX SDA*, SDA-8
saving contents on reboot, (S) *Sys Mgr Essentials*, 5-13; (S) *Sys Mgr Tuning*, 15-15
saving minimal information in, (S) *Sys Mgr Tuning*, 15-10
saving output, (P) *Alpha SDA*, SDA-170
shadowing failover, (G) *Compatibility*, 1-8
sharing, (S) *VMScluster Sys*, 10-14
storing selective portions of memory, (S) *Sys Mgr Tuning*, 15-10
tasks for managing, (S) *Sys Mgr Tuning*, 15-1
use of page file for, (S) *Sys Mgr Tuning*, 15-2
using CLUE CONFIG, (P) *Alpha SDA*, SDA-164
System dump file sizes
calculating
manually, (S) *Sys Mgr Tuning*, 15-6
with AUTOGEN, (S) *Sys Mgr Tuning*, 15-2
changing
recommended method, (S) *Sys Mgr Tuning*, 15-22
with AUTOGEN, (S) *Sys Mgr Tuning*, 15-10, 15-22
with SYSGEN, (S) *Sys Mgr Tuning*, 15-26
displaying AUTOGEN's calculations, (S) *Sys Mgr Tuning*, 15-17, 15-22
minimizing, (S) *Sys Mgr Tuning*, 15-10
required, (S) *Sys Mgr Tuning*, 15-4
for page file, (S) *Sys Mgr Tuning*, 15-4
System failures, (S) *Sys Mgr Tuning*, 15-2
See also Crash dumps
analyzing, (P) *Alpha SDA*, SDA-18; (P) *VAX SDA*, SDA-19 to SDA-31
causing, (P) *Alpha SDA*, SDA-27 to SDA-30;
(P) *VAX SDA*, SDA-31 to SDA-35
determining cause, (S) *Sys Mgr Tuning*, 15-2, 15-11
diagnosing from PC contents, (P) *Alpha SDA*, SDA-18
disposing of hardcopy output, (G) *User*, 2-26;
(S) *Security*, 3-20
example, (P) *VAX SDA*, SDA-24 to SDA-31
reporting with a Software Performance Report, (S) *Sys Mgr Tuning*, 15-11
saving contents of system dump file after, (S) *Sys Mgr Essentials*, 5-13; (S) *Sys Mgr Tuning*, 15-15

System failures (cont'd)

- security implications, (G) *User*, 2-18
- summary, (P) *Alpha SDA*, SDA-89; (P) *VAX SDA*, SDA-99
- writing of system dump file, (S) *Sys Mgr Tuning*, 15-2

System files

- adding ACLs, (S) *Security*, 8-26
- Alpha default protection, (S) *Security*, 8-26
- auditing recommendations, (S) *Security*, 10-5
- benefiting from ACLs, (S) *Security*, 10-5
- coordinating, (S) *VMScluster Sys*, 5-17
- default protection, (S) *Security*, 8-25
- duplicating using VMSKITBLD, (S) *Sys Mgr Essentials*, 2-26
- moving off system disk to improve performance, (S) *Sys Mgr Tuning*, 16-8
- on public volumes, (S) *Sys Mgr Essentials*, 8-8
- optional
 - adding or deleting, (S) *Sys Mgr Essentials*, 5-2
- protecting, (S) *Security*, 8-25
- protection codes and ownership, (S) *Security*, B-1
- recommended, (S) *Security*, 11-3
- required, (S) *Security*, 11-2
- VAX default protection, (S) *Security*, B-1

System Generation utility (SYSGEN), (G) *SW Overview*, 3-8; (G) *Compatibility*, 1-5; (S) *Sys Mgmt Util M-Z*, 5-3, 5-4

- See also System parameters
- and version checking, (S) *Sys Mgr Essentials*, 5-23

- assign parameter values, (S) *Sys Mgmt Util M-Z*, 5-15

AUTOCONFIGURE command (VAX)

- in system startup, (S) *Sys Mgr Essentials*, 5-7

- changing page, swap, and dump file sizes, (S) *Sys Mgr Tuning*, 15-22, 15-26

- changing system parameter file with, (S) *Sys Mgr Tuning*, 14-33

- changing system parameters, (S) *Sys Mgr Tuning*, 14-33, 18-20

commands

- AUTOCONFIGURE, (S) *Sys Mgmt Util M-Z*, 5-5
- CONFIGURE, (S) *Sys Mgmt Util M-Z*, 5-7
- CONNECT/ADAPTER, (S) *Sys Mgmt Util M-Z*, 5-9
- CREATE, (S) *Sys Mgmt Util M-Z*, 5-11
- DEINSTALL, (S) *Sys Mgmt Util M-Z*, 5-11
- DISABLE, (S) *Sys Mgmt Util M-Z*, 5-12
- ENABLE, (S) *Sys Mgmt Util M-Z*, 5-13
- INSTALL, (S) *Sys Mgmt Util M-Z*, 5-13
- LOAD, (S) *Sys Mgmt Util M-Z*, 5-14
- MSCP, (S) *Sys Mgmt Util M-Z*, 5-14
- RELOAD, (S) *Sys Mgmt Util M-Z*, 5-15

System Generation utility (SYSGEN) commands (cont'd)

- SET, (S) *Sys Mgmt Util M-Z*, 5-15
- SET/OUTPUT, (S) *Sys Mgmt Util M-Z*, 5-16
- SET/STARTUP, (S) *Sys Mgmt Util M-Z*, 5-17
- SHARE, (S) *Sys Mgmt Util M-Z*, 5-17
- SHARE/INITIALIZE, (S) *Sys Mgmt Util M-Z*, 5-18
- SHOW, (S) *Sys Mgmt Util M-Z*, 5-20
- SHOW/ADAPTER, (S) *Sys Mgmt Util M-Z*, 5-23
- SHOW/BUS, (S) *Sys Mgmt Util M-Z*, 5-24
- SHOW/CONFIGURATION, (S) *Sys Mgmt Util M-Z*, 5-24
- SHOW/DEVICE, (S) *Sys Mgmt Util M-Z*, 5-27
- SHOW/DRIVER, (S) *Sys Mgmt Util M-Z*, 5-28
- SHOW/STARTUP, (S) *Sys Mgmt Util M-Z*, 5-29
- SHOW/TURBOCHANNEL, (S) *Sys Mgmt Util M-Z*, 5-29
- SHOW/UNIBUS, (S) *Sys Mgmt Util M-Z*, 5-30
- TERMINAL, (S) *Sys Mgmt Util M-Z*, 5-31
- USE, (S) *Sys Mgmt Util M-Z*, 5-32
- WRITE, (S) *Sys Mgmt Util M-Z*, 5-33

configuring devices

- in system startup, (S) *Sys Mgr Essentials*, 5-7

configuring SCSI devices, (P) *I/O User*, 8-8

CONNECT command (VAX), (S) *Sys Mgr Essentials*, 7-7

- in system startup, (S) *Sys Mgr Essentials*, 5-7

connecting multiport memory, (S) *Sys Mgmt Util M-Z*, 5-17

converting parameters for use with AUTOGEN, (S) *Sys Mgr Tuning*, 14-5

CREATE command, (S) *Sys Mgr Tuning*, 15-18, 15-26

creating a new system parameter file, (S) *Sys Mgr Tuning*, 14-34

creating page, swap, and dump files, (S) *Sys Mgr Tuning*, 15-18

I/O subsystem configuration commands in SYSMAN utility on Alpha systems, (S) *Comparison*, 2-15

initializing multiport memory, (S) *Sys Mgmt Util M-Z*, 5-18

INSTALL command, (S) *Sys Mgr Tuning*, 15-19

- in SYPAGSWPFILES.COM, (S) *Sys Mgr Tuning*, 15-21

- in system startup, (S) *Sys Mgr Essentials*, 5-7

- System Generation utility (SYSGEN) (cont'd)
 - installing page, swap, and dump files, (S) *Sys Mgr Tuning*, 15-19, 15-21
 - installing page, swap and dump files in system startup, (S) *Sys Mgr Essentials*, 5-7
 - LOAD command (VAX), (S) *Sys Mgr Essentials*, 7-7
 - managing system parameters, (S) *Sys Mgr Tuning*, 14-4
 - NPAGEDYN parameter, (S) *DECnet Mgmt*, 5-31
 - operator log messages, (S) *Sys Mgr Tuning*, 18-20
 - parameters
 - See System parameters
 - running, (S) *DECnet Mgmt*, 5-31
 - showing parameter values, (S) *Sys Mgmt Util M-Z*, 5-20
 - showing system parameters, (S) *Sys Mgr Tuning*, 14-31
 - system parameters, (S) *Sys Mgmt Util M-Z*, C-1
 - system parameters in units of CPU-specific pages, (S) *Comparison*, 5-1
 - system parameters in units of pagelets, (S) *Comparison*, 5-1
 - system parameters on Alpha systems, (S) *Comparison*, 2-15
 - updating parameters for DECnet, (S) *DECnet Mgmt*, 5-31
 - work area, (S) *Sys Mgmt Util M-Z*, 5-15, 5-32, 5-33
- System global sections
 - See Global sections
 - System hang, (P) *Alpha SDA*, SDA-28; (P) *VAX SDA*, SDA-31
 - System hangup, (S) *Sys Mgr Tuning*, 17-21, 17-29
 - System images
 - contents, (P) *Alpha SDA*, SDA-61, SDA-97; (P) *VAX SDA*, SDA-64, SDA-111
 - creating, (P) *Linker*, 1-13, LINK-38
 - creating a header for, (P) *Linker*, LINK-16
 - default base address, (P) *Linker*, LINK-43
 - definition, (P) *Linker*, 1-1
 - global symbols, (P) *Alpha SDA*, SDA-59; (P) *VAX SDA*, SDA-63
 - naming, (P) *Linker*, LINK-38
 - System information
 - See Timers, statistics
 - System-level access control, (S) *DECnet Mgmt*, 2-30
 - System libraries, (P) *Interfaces*, 4-1, A-1
 - decompressing, (S) *Sys Mgr Tuning*, 16-6; (S) *VAX Perform*, 1-10
 - System library files
 - including in image map files, (P) *Linker*, LINK-8, LINK-14
 - linker processing of, (P) *Linker*, 2-13, LINK-36
 - order of processing, (P) *Linker*, 2-18
 - open systems support library, (P) *Linker*, 2-14
 - System loadable image
 - adding, (S) *Sys Mgmt Util M-Z*, 6-74
 - removing, (S) *Sys Mgmt Util M-Z*, 6-76
 - System logical name tables, (P) *Concepts*, 10-6
 - System login images
 - and detached processes, (G) *DCL N-Z*, DCLII-58
 - System macro library
 - default, (P) *Interfaces*, 4-8
 - System management, (G) *SW Overview*, 2-1, 2-15, 3-12; (S) *VMScluster Sys*, 1-7; (P) *File Appl*, 3-11
 - ATM multisite, (G) *V6.2 New Feat*, 8-12
 - AUTOGEN.COM command procedure, (S) *VMScluster Sys*, 1-10
 - backup procedures, (S) *Dependable*, 9-14
 - centralizing with SYSMAN, (S) *Sys Mgr Essentials*, 2-10
 - clearing counters, (G) *V6.2 New Feat*, 6-22; (S) *Sys Mgr Tuning*, 22-25; (S) *Sys Mgmt Util A-L*, 12-9
 - creating access control lists (ACLs), (S) *Sys Mgr Essentials*, 11-9
 - creating a crash dump file, (P) *Alpha SDA*, SDA-2; (P) *VAX SDA*, SDA-4
 - creating disk quota files, (S) *Sys Mgmt Util M-Z*, 6-23
 - data center operations, (S) *Dependable*, 9-8 to 9-9
 - defining target system, (S) *Sys Mgmt Util M-Z*, 6-52
 - deleting device information, (G) *V6.2 New Feat*, 6-17; (S) *Sys Mgr Tuning*, 22-17; (S) *Sys Mgmt Util A-L*, 12-8, 12-20
 - deleting node information, (G) *V6.2 New Feat*, 6-21; (S) *Sys Mgr Tuning*, 22-20; (S) *Sys Mgmt Util A-L*, 12-9, 12-20
 - differences on Alpha and VAX systems, (S) *Comparison*, 1-2 to 1-6
 - disabling MOP downline load service, (G) *V6.2 New Feat*, 6-17; (S) *Sys Mgr Tuning*, 22-23
 - displaying device information, (G) *V6.2 New Feat*, 6-16; (S) *Sys Mgr Tuning*, 22-15
 - displaying LAN device configurations, (G) *V6.2 New Feat*, 6-12; (S) *Sys Mgr Tuning*, 22-9
 - displaying LAN device parameters, (G) *V6.2 New Feat*, 6-9; (S) *Sys Mgr Tuning*, 22-10; (S) *Sys Mgmt Util A-L*, 12-17, 12-32
 - displaying node information, (G) *V6.2 New Feat*, 6-20; (S) *Sys Mgr Tuning*, 22-18; (S) *Sys Mgmt Util A-L*, 12-18, 12-37

System management (cont'd)

- displaying OPCOM messages, (G) *V6.2 New Feat*, 6-23; (S) *Sys Mgr Tuning*, 22-25; (S) *Sys Mgmt Util A-L*, 12-21
- displaying status and counters, (G) *V6.2 New Feat*, 6-21, 6-22; (S) *Sys Mgr Tuning*, 22-23, 22-24; (S) *Sys Mgmt Util A-L*, 12-18, 12-37
- displaying target environment, (S) *Sys Mgmt Util M-Z*, 6-56
- displaying user profile, (S) *Sys Mgmt Util M-Z*, 6-58
- displaying wait time for node response, (S) *Sys Mgmt Util M-Z*, 6-58
- DS3, (G) *V6.2 New Feat*, 8-12
- enabling MOP downline load service, (G) *V6.2 New Feat*, 6-17; (S) *Sys Mgr Tuning*, 22-23
- environment, (S) *Sys Mgr Essentials*, 2-12 to 2-15; (S) *Sys Mgmt Util M-Z*, 6-53
- establishing the software environment, (S) *Dependable*, 9-14
- for multiprocess debugging, (P) *Debugger*, 14-17
- image activation, (P) *File Appl*, 5-5
- invoking the LANCP utility, (S) *Sys Mgmt Util A-L*, 12-4
- LANACP device database, (G) *V6.2 New Feat*, 6-13; (S) *Sys Mgr Tuning*, 22-14
- LAN Auxiliary Control Program (LANACP) utility, (G) *V6.2 New Feat*, 6-26; (S) *Sys Mgr Tuning*, 22-5
- LAN Control Program (LANCP) utility, (G) *V6.2 New Feat*, 6-2; (S) *Sys Mgr Tuning*, 22-6
- LANCP command files, (G) *V6.2 New Feat*, 6-26; (S) *Sys Mgr Tuning*, 22-9
- LANCP SPAWN command, (S) *Sys Mgmt Util A-L*, 12-39
- LANCP SPAWN function, (G) *V6.2 New Feat*, 6-26; (S) *Sys Mgr Tuning*, 22-9
- LAN devices, (G) *V6.2 New Feat*, 6-4; (S) *Sys Mgr Tuning*, 22-9
- LAN enhancements, (G) *V6.2 New Feat*, 6-1; (S) *Sys Mgr Tuning*, 22-1
- LAN firmware updates, (G) *V6.2 New Feat*, 6-13; (S) *Sys Mgr Tuning*, 22-14
- LAN node database management, (G) *V6.2 New Feat*, 6-18; (S) *Sys Mgr Tuning*, 22-17
- large systems, (G) *SW Overview*, 2-14
- limiting response time, (S) *Sys Mgmt Util M-Z*, 6-55
- Load Trace facility, (G) *V6.2 New Feat*, 6-23; (S) *Sys Mgr Tuning*, 22-25
- methods and tools, (G) *V6.2 New Feat*, 8-13

System management (cont'd)

- MOP console carrier, (G) *V6.2 New Feat*, 6-24; (S) *Sys Mgr Tuning*, 22-26; (S) *Sys Mgmt Util A-L*, 12-10
- MOP downline load service management, (G) *V6.2 New Feat*, 6-21; (S) *Sys Mgr Tuning*, 22-23
- MOP trigger boot, (G) *V6.2 New Feat*, 6-25; (S) *Sys Mgr Tuning*, 22-27; (S) *Sys Mgmt Util A-L*, 12-40
- multisite, (G) *V6.2 New Feat*, 8-12
- on multiple nodes, (S) *Sys Mgr Essentials*, 2-13
- operating environments, (S) *VMScluster Sys*, 5-2
- products, (S) *VMScluster Sys*, 1-8
- responsibilities, (S) *DECnet Mgmt*, 1-12
- running the LANACP utility, (G) *V6.2 New Feat*, 6-27; (S) *Sys Mgr Tuning*, 22-6
- running the LANCP utility, (G) *V6.2 New Feat*, 6-3; (S) *Sys Mgr Tuning*, 22-7
- security policies, (S) *Dependable*, 9-19
- setting device information, (G) *V6.2 New Feat*, 6-14; (S) *Sys Mgr Tuning*, 22-15; (S) *Sys Mgmt Util A-L*, 12-11
- setting LAN device parameters, (G) *V6.2 New Feat*, 6-5; (S) *Sys Mgr Tuning*, 22-12
- setting node information, (G) *V6.2 New Feat*, 6-18; (S) *Sys Mgr Tuning*, 22-18
- setting wait time for node response, (S) *Sys Mgmt Util M-Z*, 6-55
- startup procedures
 - See Startup database
- stopping the LANACP utility, (G) *V6.2 New Feat*, 6-27; (S) *Sys Mgr Tuning*, 22-6
- storage library system, (S) *VMScluster Sys*, 1-10
- SYSMAN tasks, (S) *Sys Mgmt Util M-Z*, 6-3
- SYSMAN utility, (S) *VMScluster Sys*, 1-10
- system dump analyzer, (S) *VMScluster Sys*, 1-10
- tasks, (G) *SW Overview*, 3-8
 - clusterwide management, (S) *Sys Mgr Tuning*, 20-3
 - customizing the system, (S) *Sys Mgr Essentials*, 5-1
 - establishing node in network, (S) *Sys Mgr Tuning*, 21-11
 - installing software, (S) *Sys Mgr Essentials*, 3-4
 - managing devices, (S) *Sys Mgr Essentials*, 7-1
 - managing page, swap, and dump files, (S) *Sys Mgr Tuning*, 15-1
 - managing performance, (S) *Sys Mgr Tuning*, 16-1
 - managing security, (S) *Sys Mgr Essentials*, 11-1

System management
tasks (cont'd)

- managing storage media, (S) *Sys Mgr Essentials*, 8-1
- managing system parameters, (S) *Sys Mgr Tuning*, 14-1
- managing the queue manager and queue database, (S) *Sys Mgr Essentials*, 12-1
- managing user accounts, (S) *Sys Mgr Essentials*, 6-1
- starting up a system, (S) *Sys Mgr Essentials*, 4-1
- updating operating system, (S) *Sys Mgr Essentials*, 3-5
- upgrading operating system, (S) *Sys Mgr Essentials*, 3-5
- working with files and directories, (S) *Sys Mgr Essentials*, 9-1
- techniques, (S) *Dependable*, 9-1
- tools, (S) *Sys Mgr Essentials*, 2-2
- tools for daily operations, (S) *VMScluster Sys*, 1-8
- utilities, (G) *SW Overview*, 3-9; (S) *Sys Mgr Essentials*, 2-2
- WAN multisite, (G) *V6.2 New Feat*, 8-12
- System management differences on Alpha and VAX systems
 - availability of optional software products, (G) *Compatibility*, 1-9
 - disk quotas, (G) *Compatibility*, 1-4
 - file names, (G) *Compatibility*, 1-6
 - I/O commands in SYSMAN, (G) *Compatibility*, 1-5
 - MONITOR POOL command, (G) *Compatibility*, 1-5
 - page size, (G) *Compatibility*, 1-6
 - Patch utility, (G) *Compatibility*, 1-7
 - VMScluster support, (G) *Compatibility*, 1-7
- System management similarities on Alpha and VAX systems, (G) *Compatibility*, 1-3
- System Management utility (SYSMAN), (G) *SW Overview*, 3-13; (G) *Compatibility*, 1-5; (S) *VMScluster Sys*, 1-10
 - accessing disks, (S) *Sys Mgr Essentials*, 8-50
 - adding startup files to a startup database, (S) *Sys Mgr Essentials*, 5-20, 5-21
 - ALF commands, (S) *Sys Mgr Essentials*, 6-32
 - authorization checks in, (S) *Sys Mgr Essentials*, 2-16
 - changing privileges in, (S) *Sys Mgr Essentials*, 2-17
 - changing system parameters
 - active values, (S) *Sys Mgr Tuning*, 14-28
 - commands
 - ALF ADD, (S) *Sys Mgmt Util M-Z*, 6-10
 - ALF REMOVE, (S) *Sys Mgmt Util M-Z*, 6-11
 - ALF SHOW, (S) *Sys Mgmt Util M-Z*, 6-13

System Management utility (SYSMAN)
commands (cont'd)

- ATTACH, (S) *Sys Mgmt Util M-Z*, 6-13
- CONFIGURATION SET CLUSTER_AUTH, (S) *Sys Mgmt Util M-Z*, 6-15
- CONFIGURATION SET TIME, (S) *Sys Mgmt Util M-Z*, 6-16
- CONFIGURATION SHOW CLUSTER_AUTHORIZATION, (S) *Sys Mgmt Util M-Z*, 6-17
- CONFIGURATION SHOW TIME, (S) *Sys Mgmt Util M-Z*, 6-18
- DISKQUOTA ADD, (S) *Sys Mgmt Util M-Z*, 6-21
- DISKQUOTA CREATE, (S) *Sys Mgmt Util M-Z*, 6-22
- DISKQUOTA DELETE, (S) *Sys Mgmt Util M-Z*, 6-23
- DISKQUOTA DISABLE, (S) *Sys Mgmt Util M-Z*, 6-23
- DISKQUOTA ENABLE, (S) *Sys Mgmt Util M-Z*, 6-24
- DISKQUOTA MODIFY, (S) *Sys Mgmt Util M-Z*, 6-25
- DISKQUOTA REBUILD, (S) *Sys Mgmt Util M-Z*, 6-26
- DISKQUOTA REMOVE, (S) *Sys Mgmt Util M-Z*, 6-27
- DISKQUOTA SHOW, (S) *Sys Mgmt Util M-Z*, 6-29
- DO, (S) *Sys Mgmt Util M-Z*, 6-30
- EXITx, (S) *Sys Mgmt Util M-Z*, 6-32
- HELPx, (S) *Sys Mgmt Util M-Z*, 6-32
- IO AUTOCONFIGURE, (S) *Sys Mgmt Util M-Z*, 6-33
- IO CONNECT, (S) *Sys Mgmt Util M-Z*, 6-34
- IO LOAD, (S) *Sys Mgmt Util M-Z*, 6-37
- IO SET PREFIX, (S) *Sys Mgmt Util M-Z*, 6-38, 6-39
- IO SHOW BUS, (S) *Sys Mgmt Util M-Z*, 6-39
- IO SHOW DEVICE, (S) *Sys Mgmt Util M-Z*, 6-40
- IO SHOW EXCLUDE, (S) *Sys Mgmt Util M-Z*, 6-41
- IO SHOW PREFIX, (S) *Sys Mgmt Util M-Z*, 6-42
- LICENSE LOAD, (S) *Sys Mgmt Util M-Z*, 6-43
- LICENSE UNLOAD, (S) *Sys Mgmt Util M-Z*, 6-43
- PARAMETERS DISABLE CHECKS, (S) *Sys Mgmt Util M-Z*, 6-44
- PARAMETERS ENABLE CHECKS, (S) *Sys Mgmt Util M-Z*, 6-45
- PARAMETERS SET, (S) *Sys Mgmt Util M-Z*, 6-46

System Management utility (SYSMAN)
commands (cont'd)

PARAMETERS SHOW, (S) *Sys Mgmt Util M-Z*, 6-47
PARAMETERS USE, (S) *Sys Mgmt Util M-Z*, 6-50
PARAMETERS WRITE, (S) *Sys Mgmt Util M-Z*, 6-51
SET ENVIRONMENT, (S) *Sys Mgmt Util M-Z*, 6-52
SET PROFILE, (S) *Sys Mgmt Util M-Z*, 6-54
SET TIMEOUT, (S) *Sys Mgmt Util M-Z*, 6-55
SHOW ENVIRONMENT, (S) *Sys Mgmt Util M-Z*, 6-56
SHOW KEY, (S) *Sys Mgmt Util M-Z*, 6-57
SHOW PROFILE, (S) *Sys Mgmt Util M-Z*, 6-58
SHOW TIME, (S) *Sys Mgmt Util M-Z*, 6-58
SHUTDOWN NODE, (S) *Sys Mgmt Util M-Z*, 6-59
SPAWN, (S) *Sys Mgmt Util M-Z*, 6-62
STARTUP ADD, (S) *Sys Mgmt Util M-Z*, 6-65
STARTUP DISABLE, (S) *Sys Mgmt Util M-Z*, 6-67
STARTUP ENABLE, (S) *Sys Mgmt Util M-Z*, 6-68
STARTUP MODIFY, (S) *Sys Mgmt Util M-Z*, 6-69
STARTUP REMOVE, (S) *Sys Mgmt Util M-Z*, 6-70
STARTUP SET DATABASE, (S) *Sys Mgmt Util M-Z*, 6-71
STARTUP SET OPTIONS, (S) *Sys Mgmt Util M-Z*, 6-72
STARTUP SHOW, (S) *Sys Mgmt Util M-Z*, 6-73
SYS_LOADABLE ADD, (S) *Sys Mgmt Util M-Z*, 6-74
SYS_LOADABLE REMOVE, (S) *Sys Mgmt Util M-Z*, 6-76
command verification in, (S) *Sys Mgr Essentials*, 2-17
common tasks, (S) *Sys Mgmt Util M-Z*, 6-3
comparison of I/O subsystem commands on Alpha and VAX systems, (S) *Comparison*, 2-16
configuring devices (Alpha)
in system startup, (S) *Sys Mgr Essentials*, 5-7
converting parameters for use with AUTOGEN, (S) *Sys Mgr Tuning*, 14-5
creating command procedures for, (S) *Sys Mgr Essentials*, 2-18

System Management utility (SYSMAN) (cont'd)

deleting startup files, (S) *Sys Mgr Essentials*, 5-21
disabling startup files, (S) *Sys Mgr Essentials*, 5-22
DISKQUOTA commands, (S) *Sys Mgr Essentials*, 8-50
disk quotas with, (S) *Sys Mgr Essentials*, 8-48
Disk Quota utility, (S) *Sys Mgr Essentials*, 8-50
DO command, (S) *Sys Mgr Essentials*, 2-18
enabling cluster alias operations, (S) *VMScluster Sys*, 4-11
enabling remote systems to execute commands, (S) *Sys Mgr Essentials*, 2-12
enabling startup files, (S) *Sys Mgr Essentials*, 5-22
executing a command procedure, (S) *Sys Mgmt Util M-Z*, 6-9
executing SYSMAN commands, (S) *Sys Mgmt Util M-Z*, 6-4
exiting from, (S) *Sys Mgmt Util M-Z*, 6-5
features of, (S) *Sys Mgr Essentials*, 2-10
how commands execute, (S) *Sys Mgr Essentials*, 2-11
I/O configuration commands, (S) *Comparison*, A-1
initialization file, (S) *Sys Mgr Essentials*, 2-19;
(S) *Sys Mgmt Util M-Z*, 6-4
invoking, (S) *Sys Mgmt Util M-Z*, 6-5
IO AUTOCONFIGURE command (Alpha)
in system startup, (S) *Sys Mgr Essentials*, 5-7
IO CONNECT command (Alpha), (S) *Sys Mgr Essentials*, 7-8
in system startup, (S) *Sys Mgr Essentials*, 5-7
IO LOAD (Alpha), (S) *Sys Mgr Essentials*, 7-8
loading licenses with, (S) *Sys Mgr Essentials*, 3-8
management environment, (S) *Sys Mgr Essentials*, 2-12
managing a VMScluster, (S) *Sys Mgr Tuning*, 20-16 to 20-23
managing startup, (S) *Sys Mgr Essentials*, 5-18
managing system parameters, (S) *Sys Mgr Tuning*, 14-4, 14-25
modifying cluster group data, (S) *VMScluster Sys*, 10-16
modifying LGI parameters, (S) *Security*, 11-2
modifying the system parameter file, (S) *Sys Mgr Tuning*, 14-28
overview, (S) *Sys Mgmt Util M-Z*, 6-3
PARAMETERS command, (S) *Sys Mgr Tuning*, 14-25
summary, (S) *Sys Mgr Tuning*, 14-25

System Management utility (SYSMAN) (cont'd)

- privilege requirements, (S) *Sys Mgmt Util M-Z*, 6-5
- privileges required, (S) *Sys Mgr Essentials*, 2-11
- profile, (S) *Sys Mgr Essentials*, 2-16
 - adjusting, (S) *Sys Mgr Essentials*, 2-16
- restrictions, (S) *Sys Mgmt Util M-Z*, 6-5
- showing system parameters, (S) *Sys Mgr Tuning*, 14-27
- showing the contents of a startup database, (S) *Sys Mgr Essentials*, 5-20
- showing the name of the target startup database, (S) *Sys Mgr Essentials*, 5-20
- shutdown, (S) *Sys Mgr Essentials*, 4-34
- SMISERVER process, (S) *Sys Mgr Essentials*, 2-12
- specifying the current startup database, (S) *Sys Mgr Essentials*, 5-20
- STARTUP command, (S) *Sys Mgr Essentials*, 5-18
- startup logging, (S) *Sys Mgr Essentials*, 4-15
- startup restrictions, (S) *Sys Mgr Tuning*, 23-12
- timeout periods, (S) *Sys Mgr Essentials*, 2-18
- use of passwords, (S) *Sys Mgr Essentials*, 2-13, 2-16
- using logical names in, (S) *Sys Mgr Essentials*, 2-14
- using to centralize system management, (S) *Sys Mgr Essentials*, 2-10

System managers

- assessing auditing requirements, (S) *Security*, 9-10
- controlling proxy accounts at local node, (S) *DECnet Intro*, 3-35
- coordinating with other networks, (S) *DECnet Intro*, 3-38
- establishing DECnet configuration database, (S) *DECnet Intro*, 3-10, 3-32
- establishing dynamic asynchronous connection, (S) *DECnet Intro*, 3-24
- establishing static asynchronous connection, (S) *DECnet Intro*, 3-20
- maintaining password security at local node, (S) *DECnet Intro*, 3-35
- network responsibilities, (S) *DECnet Intro*, 2-16 to 2-17
- providing network security, (S) *DECnet Intro*, 3-34 to 3-38
- using NETCONFIG.COM, (S) *DECnet Intro*, 3-11

System map, (P) *VAX SDA*, SDA-20

System message routines

- global symbols, (P) *VAX SDA*, SDA-65

System messages

- See also Messages
- auditing, (G) *User*, 19-11
- login failure, (G) *User*, 19-10

System objects

- access, (P) *Interfaces*, B-15
- using logical names with, (G) *User*, 13-1

System overview statistics

- in Monitor utility, (S) *Sys Mgmt Util M-Z*, 1-52

System Overview window, (S) *DECamds*, 2-2, Glossary-2

- hiding node name on startup with customization file, (S) *DECamds*, 5-2
- how to define groups, (S) *DECamds*, 1-7
- known problems, (S) *DECamds*, 5-15
- menus, (S) *DECamds*, 2-3

System page file

- as dump file, (P) *Alpha SDA*, SDA-4; (P) *VAX SDA*, SDA-5
- releasing blocks containing a crash dump, (P) *Alpha SDA*, SDA-33; (P) *VAX SDA*, SDA-39

System page table

- See SPT

System parameters

- See also AUTOGEN.COM command procedure, AWSA, MODPARAMS.DAT file, and Parameter files
- ACP, (S) *Sys Mgmt Util M-Z*, C-6 to C-9
- ACP cache system, (S) *Sys Mgr Essentials*, 8-43
- ACP_REBLDSYSD, (S) *VMScluster Sys*, 6-21
- active values, (S) *Sys Mgr Tuning*, 14-3, 14-26
- adjusting for cluster growth, (S) *VMScluster Sys*, 9-18
- adjusting LRPSIZE parameter, (S) *VMScluster Sys*, 10-17
- adjusting NISCS_MAX_PKTSZ parameter, (S) *VMScluster Sys*, 10-17
- adjusting page cache size, (S) *VAX Perform*, 5-3
- affected by AUTOGEN calculations, (S) *Sys Mgr Tuning*, 14-10; (S) *Sys Mgmt Util A-L*, 6-4
- affected by AUTOGEN feedback, (S) *Sys Mgmt Util A-L*, 6-5
- ALLOCLASS, (S) *VMScluster Sys*, 6-9
- ALPHAVMSSYS.PAR file (Alpha), (S) *Sys Mgr Tuning*, 14-3
- associated with GHR feature, (S) *Comparison*, 5-15
- auditing modification of, (S) *Security*, 9-7
- automatic setting by AUTOGEN, (S) *Sys Mgr Tuning*, 14-3
- booting with default, (S) *Sys Mgr Essentials*, 4-8
- categories, (S) *Sys Mgmt Util M-Z*, C-1
- categories by function, (S) *Sys Mgr Tuning*, 14-2

System parameters (cont'd)

- caution to prevent data corruption, (S)
VMSccluster Sys, 8-22, A-3, A-4
- changed default value on Alpha systems, (S)
Comparison, 5-6
- changes in unit names only from VAX to Alpha systems, (S) *Comparison*, 5-2
- changing, (S) *VAX Perform*, 5-1
- checking AUTOGEN's settings, (S) *Sys Mgr Tuning*, 14-10
- editing MODPARAMS.DAT file, (S) *Sys Mgr Tuning*, 14-18
- recommended method, (S) *Sys Mgr Tuning*, 14-4, 14-18; (S) *Sys Mgmt Util A-L*, 6-3
- specifying values in MODPARAMS.DAT file, (S) *Sys Mgr Tuning*, 14-4
- with AUTOGEN, (S) *Sys Mgr Tuning*, 14-18
- with conversational boot, (S) *Sys Mgr Essentials*, 4-3, 4-6; (S) *Sys Mgr Tuning*, 14-36
- with SYSGEN, (S) *Sys Mgr Tuning*, 14-33
- with SYSMAN, (S) *Sys Mgr Tuning*, 14-28
- checking, (S) *Sys Mgmt Util M-Z*, 6-45
- checking AUTOGEN's settings, (S) *Sys Mgmt Util A-L*, 6-4
- checking before using VMSINSTAL.COM command procedure, (S) *Sys Mgr Essentials*, 3-7
- cluster parameters, (S) *VMSccluster Sys*, A-1 to A-4
- comparison of default values on Alpha and VAX systems, (S) *Comparison*, 5-5
- controlling disconnected processes, (S) *Security*, 7-24
- CPU-specific page units on Alpha systems, (S) *Comparison*, 5-2
- creating a new parameter file
 - with SYSGEN, (S) *Sys Mgr Tuning*, 14-34
- current values, (S) *Sys Mgr Tuning*, 14-3, 14-26
- default parameter file, (S) *Sys Mgmt Util A-L*, 6-5, 6-7
- default values, (S) *Sys Mgr Tuning*, 14-3
- defining system users (security category), (S) *Security*, 4-29
- definition, (S) *Sys Mgr Tuning*, 14-1
- descriptions, (S) *Sys Mgmt Util M-Z*, C-6 to C-57
- disabling checking, (S) *Sys Mgmt Util M-Z*, 6-44
- DISK_QUORUM, (S) *VMSccluster Sys*, A-1
- displaying, (S) *Sys Mgmt Util M-Z*, 6-47
 - device configuration, (S) *Sys Mgmt Util M-Z*, 5-24
 - device driver addresses, (S) *Sys Mgmt Util M-Z*, 5-28

System parameters

displaying (cont'd)

- I/O subsystems, (S) *Sys Mgmt Util M-Z*, 5-27; (S) *Comparison*, A-8
- parameter values, (S) *Sys Mgmt Util M-Z*, 5-20
- startup procedure, (S) *Sys Mgmt Util M-Z*, 5-29
- UNIBUS I/O addresses, (S) *Sys Mgmt Util M-Z*, 5-30
 - values, (S) *Sys Mgmt Util M-Z*, 5-20
- DR_UNIT_BASE, (G) *V6.2 New Feat*, 3-15
- dual values on Alpha systems, (S) *Comparison*, 5-3
- DUMPCBUG, (S) *Sys Mgr Tuning*, 15-3
- DUMPSTYLE, (G) *V6.2 New Feat*, 3-15; (S) *Sys Mgr Tuning*, 15-3, 15-10
- dynamic, (S) *Sys Mgr Tuning*, 14-3
- effect on other parameters, (S) *Sys Mgr Tuning*, 14-4
- ERLBUFFERPAGES, (S) *Sys Mgr Tuning*, 15-6
- ERRORLOGBUFFERS, (S) *Sys Mgr Tuning*, 15-6
- EXPECTED_VOTES, (S) *VMSccluster Sys*, 2-6, 8-12, A-1
- file extensions, (S) *Sys Mgr Tuning*, 16-7
- GBLPAGES, (S) *Sys Mgr Tuning*, 16-12
- GBLSECTIONS, (S) *Sys Mgr Tuning*, 16-12
- GH_RSRVPGCNT, (S) *Comparison*, 2-16
- initialization at boot time, (S) *Sys Mgr Tuning*, 14-36
- LGI_BRK_LIM, (G) *V6.2 New Feat*, 3-15
- limiting global buffers, (P) *File Appl*, 1-38
- LOCKDIRWT, (S) *VMSccluster Sys*, 2-16, A-2
- Login security, (S) *Sys Mgmt Util M-Z*, C-18 to C-19
- LRPSIZE, (S) *VMSccluster Sys*, A-2
- measurement change for larger page size on Alpha systems, (S) *Comparison*, 5-1
- modifying, (S) *Sys Mgmt Util M-Z*, 6-51
 - recommended method, (S) *Sys Mgmt Util A-L*, 6-3
- MSCP_LOAD, (S) *VMSccluster Sys*, 6-15, A-2
- MSCP_SERVE_ALL, (S) *VMSccluster Sys*, 6-15, A-2
- MULTIPROCESSING, (S) *Sys Mgr Tuning*, 26-3
 - on Alpha and VAX systems, (S) *Comparison*, 2-15
- MVTIMEOUT, (S) *Sys Mgr Essentials*, 8-60, 8-62
- MVTIMEOUT parameter, (S) *Dependable*, 8-22
- NISCS_CONV_BOOT, (S) *VMSccluster Sys*, 8-10, A-2, C-6
- NISCS_LAN_OVRHD, (S) *VMSccluster Sys*, A-2

System parameters (cont'd)

NISCS_LOAD_PEA0, (S) *VMScluster Sys*, A-2, C-13
NISCS_MAX_PKTSZ, (S) *VMScluster Sys*, A-3
NISCS_PORT_SERV, (S) *VMScluster Sys*, A-6
NPAGEDYN, (S) *Sys Mgr Tuning*, 26-7
on disk, (S) *Sys Mgr Tuning*, 14-3
in ALPHAVMSSYS.PAR file (Alpha), (S) *Sys Mgr Tuning*, 14-36
in VAXVMSSYS.PAR file (VAX), (S) *Sys Mgr Tuning*, 14-36
PHYSICAL_MEMORY
used on Alpha systems instead of
PHYSICALPAGES, (S) *Comparison*, 2-15
POOLCHECK
adaptive pool management on Alpha systems, (S) *Comparison*, 2-15
Process limits and quotas, (S) *Sys Mgmt Util M-Z*, C-29 to C-31
QDSKINTERVAL, (S) *VMScluster Sys*, A-3
QDSKVOTES, (S) *VMScluster Sys*, A-3
QUANTUM, (S) *Sys Mgr Tuning*, 26-8
quorum, (S) *VMScluster Sys*, 2-6
RECXXINTERVAL, (S) *VMScluster Sys*, 3-20, A-3
recommended method for changing, (S) *Sys Mgr Tuning*, 14-4, 14-5
required C2 settings, (S) *Security*, C-10
retaining with feedback option, (S) *VMScluster Sys*, 8-42
RMS, (S) *Sys Mgmt Util M-Z*, C-33 to C-34
RMS_EXTEND_SIZE, (S) *Sys Mgr Tuning*, 16-7
RMTDBG_SCRATCH_PAGES, (G) *V6.2 New Feat*, 3-15
SAVEDUMP, (S) *Sys Mgr Tuning*, 15-2, 15-3
SCSBUFFCNT, (S) *VMScluster Sys*, 9-19
SCSCONNCNT, (S) *VMScluster Sys*, 9-18
SCSNODE, (S) *Sys Mgr Tuning*, 23-10
SCSRESPCNT, (S) *VMScluster Sys*, 9-20
setting, (S) *Sys Mgmt Util M-Z*, 6-46
parameter addresses, (S) *Sys Mgmt Util M-Z*, 5-15
parameter values, (S) *Sys Mgmt Util M-Z*, 5-3, 5-15, 5-20, 5-32, 5-33
recommended method, (S) *Sys Mgmt Util A-L*, 6-3
setting parameters in MODPARAMS.DAT file, (S) *VMScluster Sys*, 6-9
SHADOWING, (G) *V6.2 New Feat*, 3-15
sharing multiport memory, (S) *Sys Mgmt Util M-Z*, 5-17
showing, (S) *Sys Mgmt Util M-Z*, 5-20
with conversational boot, (S) *Sys Mgr Essentials*, 4-3, 4-6; (S) *Sys Mgr Tuning*, 14-36
with SYSGEN, (S) *Sys Mgr Tuning*, 14-31

System parameters showing (cont'd)

with SYSMAN, (S) *Sys Mgr Tuning*, 14-27
SMP_CPUS, (S) *Sys Mgr Tuning*, 26-3, 26-6
specifying startup procedure, (S) *Sys Mgmt Util M-Z*, 5-17, 5-32, 5-33
STARTUP_P1, (S) *Sys Mgr Essentials*, 4-14
STARTUP_P1 set to MIN, (S) *VMScluster Sys*, 2-10
STARTUP_P2, (S) *Sys Mgr Essentials*, 4-14
storing your changes for use with AUTOGEN, (S) *Sys Mgr Tuning*, 14-5
summary, (S) *Sys Mgmt Util M-Z*, C-2
symmetric multiprocessing, (S) *Sys Mgr Tuning*, 26-3
System Communications Services, (S) *Sys Mgmt Util M-Z*, C-35 to C-36
TAPE_ALLOCLASS, (S) *VMScluster Sys*, 6-9, A-3
TAPE_MVTIMEOUT, (S) *Sys Mgr Essentials*, 8-60, 8-62
tasks for managing, (S) *Sys Mgr Tuning*, 14-1
terminal behavior, (S) *Sys Mgmt Util M-Z*, C-43 to C-46
TIMVCFAIL, (S) *VMScluster Sys*, A-3
TMSCP_LOAD, (S) *VMScluster Sys*, 6-15, A-3
TMSCP_SERVE_ALL, (G) *V6.2 New Feat*, 3-15
TTY_DEFCHAR, (S) *Sys Mgr Essentials*, 7-10
TTY_DEFCHAR2, (S) *Sys Mgr Essentials*, 7-10, 7-11
types of, (S) *Sys Mgr Tuning*, 14-2
UAFALTERNATE, (S) *Sys Mgr Essentials*, 4-10
updating in MODPARAMS.DAT and AGEN\$ files, (S) *VMScluster Sys*, 8-36
user definable, (S) *Sys Mgr Tuning*, 14-3
VAXCLUSTER, (S) *VMScluster Sys*, A-3
VAXVMSSYS.PAR file (VAX), (S) *Sys Mgr Tuning*, 14-3
VCC_FLAGS, (S) *Sys Mgmt Util M-Z*, C-49
VCC_FLAGS_D, (S) *Sys Mgmt Util M-Z*, C-49
VCC_FLAGS_S, (S) *Sys Mgmt Util M-Z*, C-49
VCC_MAXSIZE, (S) *Sys Mgmt Util M-Z*, C-49
VCC_MINSIZE, (S) *Sys Mgmt Util M-Z*, C-49
VCC_PTES, (G) *V6.2 New Feat*, 3-15
vector processing, (S) *Sys Mgr Tuning*, 26-5
VECTOR_MARGIN, (S) *Sys Mgr Tuning*, 26-8
VECTOR_PROC, (S) *Sys Mgr Tuning*, 26-5
VIRTUALPAGECNT, (S) *Sys Mgr Essentials*, 13-32
VMS, (S) *Sys Mgmt Util M-Z*, C-56
VOTES, (S) *VMScluster Sys*, 2-6, A-4
when incorrect values prevent the system from booting, (S) *Sys Mgr Essentials*, 4-8
work area, (S) *Sys Mgmt Util M-Z*, 6-50, 6-51
writing contents of, (S) *Sys Mgmt Util M-Z*, 6-51
writing to file, (S) *Sys Mgmt Util M-Z*, 5-33

System parameters (cont'd)

- WSMAX, (S) *Sys Mgr Essentials*, 13-30; (S) *Sys Mgr Tuning*, 26-7
- System passwords, (S) *Sys Mgmt Util A-L*, 5-40
- System PCB (process control block)
 - displaying, (P) *Alpha SDA*, SDA-129
- System privileges, (S) *DECnet Mgmt*, 5-1
 - determining own, (S) *DECnet Intro*, 3-1
- DIAGNOSE, (S) *DECnet Mgmt*, 5-2
 - for access control, (S) *DECnet Mgmt*, 2-31
 - for DECnet system management, (S) *DECnet Intro*, 3-6
 - for network operations, (S) *DECnet Intro*, 2-2
 - minimum for network login, (S) *DECnet Intro*, 3-1
- NETMBX, (S) *DECnet Intro*, 2-2, 3-1; (S) *DECnet Mgmt*, 2-31
- OPER, (S) *DECnet Intro*, 3-33; (S) *DECnet Mgmt*, 5-5, 5-10, 5-11
 - protecting files, (G) *User*, 4-16
- SYSPRV, (S) *DECnet Intro*, 3-33; (S) *DECnet Mgmt*, 5-5, 5-10
- TMPMBX, (S) *DECnet Intro*, 2-2, 3-1; (S) *DECnet Mgmt*, 2-31
 - to configure network, (S) *DECnet Mgmt*, 5-1
- System processes, (P) *VAX SDA*, SDA-77
- System protection code, (P) *Rec Mgmt Util*, 4-22
- /SYSTEM qualifier, (P) *Linker*, LINK-38; (P) *Debugger*, 7-9; (P) *Alpha SDA*, SDA-49, SDA-72, SDA-112, SDA-129, SDA-151; (P) *VAX SDA*, SDA-56, SDA-77, SDA-127, SDA-131, SDA-150
 - in Mount utility, (S) *Sys Mgmt Util M-Z*, 2-36
- System region
 - examining, (P) *Alpha SDA*, SDA-49; (P) *VAX SDA*, SDA-56
- System resources
 - networking activity, (S) *DECnet Intro*, 4-7
- System responsiveness
 - dependent on resources, (S) *VAX Perform*, 3-8
- System routines, (P) *Environment*, 10-1
 - documentation, (P) *Interfaces*, 1-1 to 1-12
 - returns register data, (P) *Interfaces*, 1-5
- Systems
 - See also Alpha systems, OpenVMS systems, and VAX systems
 - accessing, (G) *DCL A-M*, DCLII-410
 - analyzing running, (P) *Alpha SDA*, SDA-2, SDA-9 to SDA-10, SDA-30; (P) *VAX SDA*, SDA-4, SDA-11, SDA-35
 - building blocks for dependable computing, (S) *Dependable*, 3-1
 - changing
 - date, (G) *DCL N-Z*, DCLII-229
 - passwords, (G) *DCL N-Z*, DCLII-177
 - time, (G) *DCL N-Z*, DCLII-229
 - communications options, (S) *Dependable*, 3-5 to 3-7

Systems (cont'd)

- controlling access to, (S) *Security*, 3-5
 - controlling use of, (G) *User*, 2-5; (S) *Security*, 3-3
 - dependable software applications, (S) *Dependable*, 8-1
 - displaying
 - information on, (G) *DCL N-Z*, DCLII-241
 - status, (G) *DCL N-Z*, DCLII-241
 - environmental factors, (S) *Dependable*, 3-2, 3-3
 - exception dispatcher, (P) *Concepts*, 13-24
 - failures and recoveries, (S) *Dependable*, 9-10
 - getting information asynchronously, (P) *Sys Svc II*, SYS2-47
 - getting information synchronously, (P) *Sys Svc II*, SYS2-65
 - hardware options, (S) *Dependable*, 3-3 to 3-5
 - hot standby sites, (S) *Dependable*, 5-11
 - implementation tradeoffs, (S) *Dependable*, 4-13 to 4-14
 - integration of software, (S) *Dependable*, 8-31
 - investigating performance problems, (P) *Alpha SDA*, SDA-9; (P) *VAX SDA*, SDA-11
 - kernel level redundancy, (S) *Dependable*, 4-5
 - mailbox, (P) *Concepts*, 9-42
 - multiple-site data center VMScluster, (S) *Dependable*, 5-11, 6-17, 7-12
 - network redundancy, (S) *Dependable*, 4-11
 - operational procedures options, (S) *Dependable*, 3-12 to 3-14
 - outages
 - surviving external failures, (S) *Dependable*, 8-30
 - performance tradeoffs, (S) *Dependable*, 4-3 to 4-13
 - personnel options, (S) *Dependable*, 3-15 to 3-16
 - principles for creating dependability, (S) *Dependable*, 2-1
 - software options, (S) *Dependable*, 3-7 to 3-12
 - using new equipment, (S) *Dependable*, 3-4
- ## SYSTEMS class
- adding or restoring, (S) *Sys Mgmt Util M-Z*, 4-31
 - fields belonging to, (S) *Sys Mgmt Util M-Z*, 4-27
 - removing, (S) *Sys Mgmt Util M-Z*, 4-46
- ## Systems Communications Services
- See SCS
- ## System security
- audit log file, (G) *User*, 19-11
- ## System service access, (P) *Concepts*, 6-1, 6-2
- ## System service calls, (S) *DECnet Mgmt*, 1-18, 8-14, 8-15, 8-24
- summary for nontransparent use, (S) *DECnet Mgmt*, 8-24, 8-31

System service calls (cont'd)

summary for transparent use, (S) *DECnet Mgmt*, 8-17, 8-20

System service exception, (P) *RMS Ref*, 2-6

System services, (P) *Environment*, 10-4; (P) *Modular Proc*, 3-7, A-1

Abort Transaction, (P) *Sys Svc I*, SYS1-3

Abort Transaction and Wait, (P) *Sys Svc I*, SYS1-7

Add Holder Record to Rights Database, (P) *Sys Svc I*, SYS1-8

Add Identifier to Rights Database, (P) *Sys Svc I*, SYS1-11

Add Proxy (VAX only), (P) *Sys Svc I*, SYS1-14

Adjust Outer Mode Stack Pointer, (P) *Sys Svc I*, SYS1-18

Adjust Working Set Limit, (P) *Sys Svc I*, SYS1-20

Affect Process Scheduling, (P) *Sys Svc II*, SYS2-231

Allocate Device, (P) *Sys Svc I*, SYS1-22

Assign I/O Channel, (P) *Sys Svc I*, SYS1-38

Associate Common Event Flag Cluster, (P) *Sys Svc I*, SYS1-25

AST, (P) *Environment*, 10-5, 10-7

asynchronous and synchronous, (P) *Concepts*, 14-28

Audit Event, (P) *Sys Svc I*, SYS1-43

Audit Event and Wait, (P) *Sys Svc I*, SYS1-61

Breakthrough, (P) *Sys Svc I*, SYS1-68

Breakthrough and Wait, (P) *Sys Svc I*, SYS1-76

calling, (P) *Interfaces*, 4-1

Cancel Exit Handler, (P) *Sys Svc I*, SYS1-79

Cancel I/O on Channel, (P) *Sys Svc I*, SYS1-77

Cancel Timer, (P) *Sys Svc I*, SYS1-80

Cancel Wakeup, (P) *Sys Svc I*, SYS1-82

Change to Executive Mode, (P) *Sys Svc I*, SYS1-110

Change to Kernel Mode, (P) *Sys Svc I*, SYS1-112

Check Access, (P) *Sys Svc I*, SYS1-84

Check Access Protection, (P) *Sys Svc I*, SYS1-99

Check Floating Point (Alpha only), (P) *Sys Svc I*, SYS1-92

checking completion status of, (P) *Sys Svc II*, SYS2-392

Check Privilege, (P) *Sys Svc I*, SYS1-93

Check Privilege and Wait, (P) *Sys Svc I*, SYS1-98

Clear Cluster Event (Alpha only), (P) *Sys Svc I*, SYS1-107

Clear Event Flag, (P) *Sys Svc I*, SYS1-109

cluster event notification, (P) *Environment*, 10-5, 10-7

condition handling, (P) *Environment*, 10-5, 10-7

System services (cont'd)

Convert ASCII String to Binary Time, (P) *Sys Svc I*, SYS1-62

Convert ASCII String to UTC Binary Time, (P) *Sys Svc I*, SYS1-65

Convert Binary Time to ASCII String, (P) *Sys Svc I*, SYS1-29

Convert Binary Time to Numeric Time, (P) *Sys Svc II*, SYS2-163

Convert UTC Time to Numeric Components, (P) *Sys Svc II*, SYS2-165

Convert UTC to ASCII, (P) *Sys Svc I*, SYS1-35

Create and Map Section, (P) *Sys Svc I*, SYS1-156

Create Logical Name, (P) *Sys Svc I*, SYS1-120

Create Logical Name Table, (P) *Sys Svc I*, SYS1-126

Create Mailbox and Assign Channel, (P) *Sys Svc I*, SYS1-132

Create Process, (P) *Sys Svc I*, SYS1-139

Create Rights Database, (P) *Sys Svc I*, SYS1-114

Create User Profile, (P) *Sys Svc I*, SYS1-116

Create Virtual Address Space, (P) *Sys Svc I*, SYS1-153

Deallocate Device, (P) *Sys Svc I*, SYS1-170

Deassign I/O Channel, (P) *Sys Svc I*, SYS1-172

DECdtm, (P) *Environment*, 10-5, 10-7

Declare AST, (P) *Sys Svc I*, SYS1-174

Declare Change Mode or Compatibility Mode Handler, (P) *Sys Svc I*, SYS1-176

Declare Exit Handler, (P) *Sys Svc I*, SYS1-179

Delete Common Event Flag Cluster, (P) *Sys Svc I*, SYS1-217

Delete Global Section, (P) *Sys Svc I*, SYS1-204

Delete Intrusion Records (VAX only), (P) *Sys Svc I*, SYS1-181

Delete Logical Name, (P) *Sys Svc I*, SYS1-186

Delete Mailbox, (P) *Sys Svc I*, SYS1-189

Delete or Modify Proxy (VAX only), (P) *Sys Svc I*, SYS1-183

Delete Process, (P) *Sys Svc I*, SYS1-191

Delete Virtual Address Space, (P) *Sys Svc I*, SYS1-193

Dequeue Lock Request, (P) *Sys Svc I*, SYS1-195

Disable Alignment Fault Reporting (Alpha only), (P) *Sys Svc II*, SYS2-170

Disassociate Common Event Flag Cluster, (P) *Sys Svc I*, SYS1-168

Dismount Volume, (P) *Sys Svc I*, SYS1-207

Display Proxy Information (VAX only), (P) *Sys Svc I*, SYS1-211

Distributed Name Service (DNS) Clerk (VAX only), (P) *Sys Svc I*, SYS1-219, SYS1-246

End Transaction, (P) *Sys Svc I*, SYS1-247

End Transaction and Wait, (P) *Sys Svc I*, SYS1-252

System services (cont'd)

Enqueue Lock Request, (*P Sys Svc I*,
 SYS1-253
 Enqueue Lock Request and Wait, (*P Sys Svc I*,
 SYS1-264
 event flag, (*P Environment*, 10-5, 10-8
 executing
 asynchronously, (*P Interfaces*, 4-5
 synchronously, (*P Interfaces*, 4-5
 execution wait, (*P Interfaces*, 4-6
 Exit, (*P Sys Svc I*, SYS1-268
 Expand Program/Control Region, (*P Sys Svc I*,
 SYS1-269
 file management, (*P Environment*, 10-5, 10-8
 Find Holder of Identifier, (*P Sys Svc I*,
 SYS1-300
 Find Identifiers Held by User, (*P Sys Svc I*,
 SYS1-297
 Force Exit, (*P Sys Svc I*, SYS1-305
 Format Access Control List Entry, (*P Sys Svc*
I, SYS1-308
 Format Security Audit Event Message, (*P Sys*
Svc I, SYS1-321
 Formatted ASCII Output Services, (*P Sys Svc*
I, SYS1-272
 Get Alignment Fault Data (Alpha only), (*P*
Sys Svc II, SYS2-80
 Get Arithmetic Exception Information (Alpha
 only), (*P Sys Svc II*, SYS2-82
 Get Device/Volume Information, (*P Sys Svc I*,
 SYS1-325
 Get Device/Volume Information and Wait, (*P*
Sys Svc I, SYS1-345
 Get Job/Process Information, (*P Sys Svc I*,
 SYS1-346
 Get Job/Process Information and Wait, (*P Sys*
Svc I, SYS1-366
 Get Lock Information, (*P Sys Svc I*, SYS1-367
 Get Lock Information and Wait, (*P Sys Svc I*,
 SYS1-379
 Get Message, (*P Sys Svc I*, SYS1-380
 Get Queue Information, (*P Sys Svc II*, SYS2-3
 Get Queue Information and Wait, (*P Sys Svc*
II, SYS2-46
 Get Security Characteristics, (*P Sys Svc II*,
 SYS2-84
 Get Security Erase Pattern, (*P Sys Svc I*,
 SYS1-265
 Get System Alignment Fault Data (Alpha only),
 (*P Sys Svc II*, SYS2-92
 Get Systemwide Information, (*P Sys Svc II*,
 SYS2-47
 Get Systemwide Information and Wait, (*P Sys*
Svc II, SYS2-65
 Get Time, (*P Sys Svc II*, SYS2-66
 Get User Authorization Information, (*P Sys*
Svc II, SYS2-67
 Get UTC Time, (*P Sys Svc II*, SYS2-79

System services (cont'd)

Grant Identifier to Process, (*P Sys Svc II*,
 SYS2-96
 Hash Password, (*P Sys Svc II*, SYS2-100
 Hibernate, (*P Sys Svc II*, SYS2-103
 I/O, (*P Environment*, 10-6, 10-8
 Initialize System Alignment Fault Reporting
 (Alpha only), (*P Sys Svc II*, SYS2-110
 Initialize Volume, (*P Sys Svc II*, SYS2-113
 Initializing volumes, (*P Concepts*, 9-36
 loading site-specific, (*P Concepts*, 23-26
 lock management, (*P Environment*, 10-6,
 10-10
 Lock Pages in Memory, (*P Sys Svc II*,
 SYS2-126
 Lock Pages in Working Set, (*P Sys Svc II*,
 SYS2-129
 logical name, (*P Environment*, 10-6, 10-10
 macros, (*P Interfaces*, 4-1, A-1
 Magnetic Tape Accessibility, (*P Sys Svc II*,
 SYS2-160
 Map Global Section, (*P Sys Svc II*, SYS2-132
 memory management, (*P Environment*, 10-6,
 10-10
 Modify Holder Record in Rights Database, (*P*
Sys Svc II, SYS2-138
 Modify Identifier in Rights Database, (*P Sys*
Svc II, SYS2-141
 Mount Volume, (*P Sys Svc II*, SYS2-145
 obsolete, (*P Sys Svc II*, A-1
 obtaining information about processes, (*P*
Concepts, 3-5, 3-8
 Parse Access Control List Entry, (*P Sys Svc*
II, SYS2-167
 privileges, (*P Interfaces*, 4-2
 process control, (*P Environment*, 10-6, 10-11
 process information, (*P Environment*, 10-6,
 10-12
 Process Scan, (*P Sys Svc II*, SYS2-173
 Purge Working Set, (*P Sys Svc II*, SYS2-186
 Put Message, (*P Sys Svc II*, SYS2-188
 Queue I/O Request, (*P Sys Svc II*, SYS2-195
 Queue I/O Request and Wait, (*P Sys Svc II*,
 SYS2-200
 Read Event Flags, (*P Sys Svc II*, SYS2-201
 Release Vector Processor (VAX only), (*P Sys*
Svc II, SYS2-203
 Remove Holder Record from Rights Database,
 (*P Sys Svc II*, SYS2-204
 Remove Identifier from Rights Database, (*P*
Sys Svc II, SYS2-206
 Report Alignment Fault (Alpha only), (*P Sys*
Svc II, SYS2-171
 Reschedule Process, (*P Sys Svc II*, SYS2-208
 resolving references to, (*P Linker*, 2-14, 2-18,
 LINK-34, LINK-36
 resource wait, (*P Interfaces*, 4-6

System services (cont'd)

Restore Vector Processor Exception State (VAX only), (P) *Sys Svc II*, SYS2-209
 Restore Vector State (VAX only), (P) *Sys Svc II*, SYS2-211
 restrictions, (P) *Interfaces*, 4-2
 Resume Process, (P) *Sys Svc II*, SYS2-213
 return status, (P) *Concepts*, 13-21
 Revoke Identifier from Process, (P) *Sys Svc II*, SYS2-215
 RMS Rundown, (P) *Sys Svc II*, SYS2-219
 Save Vector Processor Exception State (VAX only), (P) *Sys Svc II*, SYS2-221
 Scan for Devices, (P) *Sys Svc I*, SYS1-200
 Scan Intrusion Database (VAX only), (P) *Sys Svc II*, SYS2-223
 Scan String for File Specification, (P) *Sys Svc I*, SYS1-291
 Schedule Wakeup, (P) *Sys Svc II*, SYS2-228
 security, (P) *Environment*, 10-6, 10-12
 Send Message to Error Logger, (P) *Sys Svc II*, SYS2-304
 Send Message to Operator, (P) *Sys Svc II*, SYS2-363
 Send to Job Controller, (P) *Sys Svc II*, SYS2-305
 Send to Job Controller and Wait, (P) *Sys Svc II*, SYS2-362
 Set AST Enable, (P) *Sys Svc II*, SYS2-236
 Set Automatic Unshelving, (P) *Sys Svc II*, SYS2-269
 Set Cluster Event (Alpha only), (P) *Sys Svc II*, SYS2-237
 Set Default Directory, (P) *Sys Svc II*, SYS2-240
 Set Default File Protection, (P) *Sys Svc II*, SYS2-242
 Set Event Flag, (P) *Sys Svc II*, SYS2-244
 Set Exception Vector, (P) *Sys Svc II*, SYS2-245
 Set IEEE Floating-Point Control Register (Alpha only), (P) *Sys Svc II*, SYS2-108
 Set Power Recovery AST, (P) *Sys Svc II*, SYS2-252
 Set Priority, (P) *Sys Svc II*, SYS2-254
 Set Privileges, (P) *Sys Svc II*, SYS2-262
 Set Process Name, (P) *Sys Svc II*, SYS2-258
 Set Process Swap Mode, (P) *Sys Svc II*, SYS2-273
 Set Protection on Pages, (P) *Sys Svc II*, SYS2-259
 Set Resource Domain, (P) *Sys Svc II*, SYS2-287
 Set Resource Wait Mode, (P) *Sys Svc II*, SYS2-267
 Set Security, (P) *Sys Svc II*, SYS2-292
 Set Stack Limits, (P) *Sys Svc II*, SYS2-271
 Set System Time, (P) *Sys Svc II*, SYS2-247
 Set Timer, (P) *Sys Svc II*, SYS2-249

System services (cont'd)

Set User Authorization Information, (P) *Sys Svc II*, SYS2-275
 Show Intrusion Information (VAX only), (P) *Sys Svc II*, SYS2-299
 Start Alignment Fault Reporting (Alpha only), (P) *Sys Svc II*, SYS2-377
 Start Transaction, (P) *Sys Svc II*, SYS2-380
 Start Transaction and Wait, (P) *Sys Svc II*, SYS2-384
 Stop Alignment Fault Reporting (Alpha only), (P) *Sys Svc II*, SYS2-385
 Stop System Alignment Fault Reporting (Alpha only), (P) *Sys Svc II*, SYS2-386
 Subsystem, (P) *Sys Svc II*, SYS2-387
 Suspend Process, (P) *Sys Svc II*, SYS2-389
 Synchronize, (P) *Sys Svc II*, SYS2-392
 Terminate Rights Database Context, (P) *Sys Svc I*, SYS1-303
 Test Cluster Event (Alpha only), (P) *Sys Svc II*, SYS2-401
 testing for successful completion, (P) *Interfaces*, 4-9
 Time Converter, (P) *Sys Svc II*, SYS2-394
 timer and time conversion, (P) *Environment*, 10-6, 10-14
 Translate Identifier Name to Identifier, (P) *Sys Svc I*, SYS1-32
 Translate Identifier to Identifier Name, (P) *Sys Svc II*, SYS2-105
 Translate Logical Name, (P) *Sys Svc II*, SYS2-396
 Unlock Pages from Memory, (P) *Sys Svc II*, SYS2-403
 Unlock Pages from Working Set, (P) *Sys Svc II*, SYS2-405
 Unwind Call Stack, (P) *Sys Svc II*, SYS2-407
 Unwind Call Stack (Alpha only), (P) *Sys Svc II*, SYS2-94
 Update Section File on Disk, (P) *Sys Svc II*, SYS2-409
 Update Section File on Disk and Wait, (P) *Sys Svc II*, SYS2-414
 used to access remote files, (S) *DECnet Intro*, 2-12
 user-written, (P) *Linker*, 4-11
 Verify Proxy (VAX only), (P) *Sys Svc II*, SYS2-415
 Wait for Logical AND of Event Flags, (P) *Sys Svc II*, SYS2-423
 Wait for Logical OR of Event Flags, (P) *Sys Svc II*, SYS2-425
 Wait for Single Event Flag, (P) *Sys Svc II*, SYS2-420
 Wake Process from Hibernation, (P) *Sys Svc II*, SYS2-421

System shutdown

- See also SHUTDOWN.COM command procedure and SYSHUTDOWN.COM command procedure
- adjusting quorum when shutting down a node, (S) *Sys Mgr Essentials*, 4-29
- after software installation, (S) *Sys Mgr Essentials*, 3-13
- allowing batch and print jobs to complete before, (S) *Sys Mgr Essentials*, 13-55
- caution about timing of system halt, (S) *Sys Mgr Tuning*, 15-2
- checking for existence of system files before, (S) *Sys Mgr Essentials*, 4-29
- customizing, (S) *Sys Mgr Essentials*, 4-32
 - with SYSHUTDOWN.COM command procedure, (S) *Sys Mgr Essentials*, 4-27
- defining the minimum number of minutes before shutdown, (S) *Sys Mgr Essentials*, 4-33
- emergency procedure
 - OPCCRASH, (S) *Sys Mgr Essentials*, 4-27, 4-36
- emergency procedures
 - console, (S) *Sys Mgr Essentials*, 4-27
- for an entire VMScluster, (S) *Sys Mgr Essentials*, 4-29
- notification of, (S) *Sys Mgr Essentials*, 4-33
- operator-requested, (P) *VAX SDA*, SDA-7
- options
 - automatic reboot, (S) *Sys Mgr Essentials*, 4-29
 - manual reboot, (S) *Sys Mgr Essentials*, 4-29
 - specifying time interval between DISABLE AUTOSTART/QUEUES and STOP /QUEUES/ON_NODE commands, (S) *Sys Mgr Essentials*, 13-56
 - time of shutdown, (S) *Sys Mgr Essentials*, 4-33
- orderly, (S) *Sys Mgr Essentials*, 4-27
- order of events, (S) *Sys Mgr Essentials*, 4-31
- preparing queue for, (G) *DCL N-Z*, DCLII-401
- procedures for performing, (S) *Sys Mgr Essentials*, 4-27
- saving AUTOGEN feedback data, (S) *Sys Mgr Essentials*, 4-29
- SHUTDOWN.COM, (S) *Sys Mgr Essentials*, 4-27
- stopping autostart queues before, (G) *DCL A-M*, DCLI-174
- stopping queues before, (G) *DCL N-Z*, DCLII-400; (S) *Sys Mgr Essentials*, 13-55
- to install changed system parameters, (S) *Sys Mgmt Util A-L*, 6-8
- with SYSMAN, (S) *Sys Mgr Essentials*, 4-34

System space base address, (P) *Alpha SDA*, SDA-15; (P) *VAX SDA*, SDA-18

System space operator (G), (P) *Alpha SDA*, SDA-13; (P) *VAX SDA*, SDA-16

System startup

- See also Booting and Startup command procedure
- analyzing a crash dump, (S) *Sys Mgr Essentials*, 5-13
- and OPCOM, (S) *DECnet Intro*, 4-4
- assigning systemwide logical names, (S) *Sys Mgr Essentials*, 5-8
- booting with minimum, (S) *Sys Mgr Essentials*, 4-14
- CONFIGURE phase, (S) *Sys Mgr Essentials*, 7-6
- configuring devices, (S) *Sys Mgr Essentials*, 4-4, 5-7, 7-6
- controlling when booting, (S) *Sys Mgr Essentials*, 4-12
- creating systemwide announcements, (S) *Sys Mgr Essentials*, 5-14
- defining location of systemwide login procedure, (S) *Sys Mgr Essentials*, 5-17
- definition of logical names, (S) *Sys Mgr Essentials*, 5-4, 5-5
- description, (S) *Sys Mgr Essentials*, 4-12
- displaying startup commands as they execute, (S) *Sys Mgr Essentials*, 4-14
- enabling autostart, (S) *Sys Mgr Essentials*, 5-12
- events, (S) *Sys Mgr Essentials*, 4-4
 - order of, (S) *Sys Mgr Essentials*, 5-4
 - possibility of future change in order, (S) *Sys Mgr Essentials*, 5-5
- freeing dump information from page file, (S) *Sys Mgr Tuning*, 15-4
- in an emergency
 - with default system parameters, (S) *Sys Mgr Essentials*, 4-8
 - without startup and login procedures, (S) *Sys Mgr Essentials*, 4-8
 - without the UAF, (S) *Sys Mgr Essentials*, 4-10
- installing images, (S) *Sys Mgr Tuning*, 16-10
- installing page and swap files, (S) *Sys Mgr Essentials*, 5-6; (S) *Sys Mgr Tuning*, 15-5, 15-19, 15-21
- limiting the number of interactive users, (S) *Sys Mgr Essentials*, 5-16
- location of files used in, (S) *Sys Mgr Essentials*, 4-4
- logging, (S) *Sys Mgmt Util M-Z*, 6-72
- making remote InfoServer devices available, (S) *Sys Mgr Tuning*, 23-14
- messages
 - indicating execution of site-independent startup, (S) *Sys Mgr Essentials*, 4-5

- System startup
 - messages (cont'd)
 - indicating execution of site-specific startup, (S) *Sys Mgr Essentials*, 4-5
 - mounting the queue database disk, (S) *Sys Mgr Essentials*, 12-6
 - performing site-specific operations, (S) *Sys Mgr Essentials*, 5-10
 - phase, (S) *Sys Mgmt Util M-Z*, 6-66
 - purging the operator log file, (S) *Sys Mgr Essentials*, 5-14
 - saving contents of system dump file, (S) *Sys Mgr Tuning*, 15-15
 - setting
 - printer device characteristics, (S) *Sys Mgr Essentials*, 7-13
 - terminal device characteristics, (S) *Sys Mgr Essentials*, 7-10
 - setting up a LAT network, (S) *Sys Mgr Essentials*, 5-15
 - starting InfoServer Client for OpenVMS
 - software, (S) *Sys Mgr Essentials*, 5-13
 - starting queues, (S) *Sys Mgr Essentials*, 5-12
 - starting the DECnet network, (S) *Sys Mgr Essentials*, 5-15
 - starting the queue manager, (S) *Sys Mgr Essentials*, 12-3
 - startup command procedures, (S) *Sys Mgr Essentials*, 5-2
 - status, (S) *Sys Mgmt Util M-Z*, 6-72
 - submitting batch jobs, (S) *Sys Mgr Essentials*, 5-14
 - suppressing autoconfiguration, (S) *Sys Mgr Essentials*, 5-8, 7-8
 - tasks, (S) *Sys Mgr Essentials*, 4-1
 - VMS\$PHASES.DAT database, (S) *Sys Mgr Essentials*, 5-4
- System symbol table, (P) *Alpha SDA*, SDA-7; (P) *VAX SDA*, SDA-8, SDA-17
- System time
 - See also Time
 - resetting after January 1st, (S) *Sys Mgr Tuning*, 20-18
 - setting, (S) *Sys Mgmt Util M-Z*, 6-16
- System time quadword
 - examining, (P) *Alpha SDA*, SDA-49; (P) *VAX SDA*, SDA-56
- System timer
 - canceling, (P) *Concepts*, 3-36
 - setting, (P) *Concepts*, 3-35
- System tuning, (G) *SW Overview*, 3-10, 3-11
 - See also Tuning
- System user authorization file
 - See SYSUAFs
- System users (security category), (S) *Security*, 4-8, 4-29
 - defining with MAXSYSGROUP parameter, (S) *Security*, 4-24; (S) *Sys Mgr Essentials*, 11-8
 - qualifications for, (S) *Security*, 4-24; (S) *Sys Mgr Essentials*, 11-8
- System version
 - registering images with dependencies on, (S) *Sys Mgr Essentials*, 5-22
- System volumes
 - definition, (S) *Sys Mgr Essentials*, 8-8
- Systemwide information, getting, (P) *LIB\$*, LIB-209
- Systemwide logical names, (S) *Sys Mgr Essentials*, 5-8
- system_access_id data type, (P) *Interfaces*, B-15
- SYSTEM_CHECK parameter, (S) *Alpha Perform*, 10-10
- SYSTEM_PRIMITIVES.EXE file
 - global symbols, (P) *VAX SDA*, SDA-65
- SYSTEM_PRIMITIVES.STB file
 - global symbols, (P) *Alpha SDA*, SDA-62
- SYSTEM_SYNCHRONIZATION.EXE file
 - global symbols, (P) *VAX SDA*, SDA-65
- SYSTEM_SYNCHRONIZATION_xxx.STB file
 - global symbols, (P) *Alpha SDA*, SDA-62
- SYSTEST account
 - initial modification, (S) *Sys Mgr Essentials*, 6-9
 - in UAF, (S) *Sys Mgr Essentials*, 6-7
 - logging into for UETP, (S) *Sys Mgr Tuning*, 17-2, 17-4
 - privileges required for UETP, (S) *Sys Mgr Tuning*, 17-23
 - quotas required to run UETP, (S) *Sys Mgr Tuning*, 17-23
- SYSTEST directory
 - creating for UETP, (S) *Sys Mgr Tuning*, 17-6
 - function during UETP, (S) *Sys Mgr Tuning*, 17-4
- SYSTEST_CLIG account
 - in UAF, (S) *Sys Mgr Essentials*, 6-7
 - reenabling for UETP, (S) *Sys Mgr Tuning*, 17-10
 - requirements for UETP, (S) *Sys Mgr Tuning*, 17-10, 17-37
- SYSUAF.DAT files, (G) *SW Overview*, 3-15
 - See also UAFs
 - authorization elements, (S) *VMScluster Sys*, 5-14
 - creating common version, (S) *VMScluster Sys*, B-2
 - determining process limits and quotas, (S) *VMScluster Sys*, 10-18
 - merging, (S) *VMScluster Sys*, B-1
 - moving to reduce system disk I/O, (S) *Sys Mgr Tuning*, 16-8

SYSUAF.DAT files (cont'd)

- printing listing of, (S) *VMScluster Sys*, B-1
- setting up, (S) *VMScluster Sys*, 5-17
- SYSUAFALT.DAT files, (S) *Sys Mgr Essentials*, 4-10
 - authorization elements, (S) *VMScluster Sys*, 5-16
- SYSUAF logical name
 - defining, (S) *Sys Mgmt Util A-L*, 5-5
 - defining during system startup, (S) *Sys Mgr Essentials*, 5-8
 - defining to reduce system disk I/O, (S) *Sys Mgr Tuning*, 16-8
- SYSUAFs (system user authorization files)
 - modifying, (S) *Sys Mgmt Util A-L*, 5-3
- SYS_LOADABLE ADD command
 - in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-74
- SYS_LOADABLE REMOVE command
 - in SYSMAN, (S) *Sys Mgmt Util M-Z*, 6-76

T

- T3 intersite link specifications, (G) *V6.2 New Feat*, 8-10
- TA90E tape drive
 - support for, (G) *DCL N-Z, DCLII-171*
 - using /MEDIA_FORMAT qualifier, (G) *DCL N-Z, DCLII-171*
- Tab key, (G) *User*, 3-19
- Table of contents
 - creating, (G) *DCL N-Z, DCLII-66*
- Tablets
 - obtaining data from, (P) *SMG\$, 3-1*
- Tabs
 - Ctrl/I, (P) *I/O User*, 5-6
 - terminal mechanical, (P) *I/O User*, 5-22
 - terminal tab stops, (P) *I/O User*, 5-37
- Tab stop
 - advancing to using Ctrl/K, (G) *User*, 3-19
- Tagged command queuing
 - device support, (G) *V6.2 New Feat*, 4-11
 - I/O requests, (G) *V6.2 New Feat*, 4-11
- Tags
 - See File tags
- Tailoring a system disk
 - with VMSTAILOR and DECW\$TAILOR, (S) *Sys Mgr Essentials*, 5-1
- Tailoring the configuration database, (S) *DECnet Mgmt*, 5-11
- Tailoring utilities
 - See DECwindows, Tailoring utility
- Tailoring utilities (VMSTAILOR and DECW\$TAILOR), (S) *Sys Mgr Essentials*, 5-1
- Tailoring utility (VMSTAILOR)
 - supported on Alpha systems, (S) *Comparison*, 2-5
- tand routine, (P) *Portable Math*, DPML-57, B-13
- Tangent, (P) *MTH\$, MTH-105, MTH-107, MTH-138, MTH-140*
 - hyperbolic, (P) *MTH\$, MTH-109, MTH-142*
- tanh routine, (P) *Portable Math*, DPML-58, B-14
- tan routine, (P) *Portable Math*, DPML-57, B-13
- Tape cartridge drives
 - preparing for UETP, (S) *Sys Mgr Tuning*, 17-7
- Tape class drivers, (S) *VMScluster Sys*, 1-4, 2-18
 - disabling the loading of, (P) *I/O User*, 8-9
- Tape commands
 - DISMOUNT, (S) *Sys Mgr Essentials*, 8-44
 - MOUNT, (S) *Sys Mgr Essentials*, 8-18
- Tape controllers, (S) *VMScluster Sys*, 1-3
- Tape drive
 - using /MEDIA_FORMAT qualifier, (S) *Sys Mgmt Util A-L*, 7-46
- Tape files, (P) *Rec Mgmt Util*, 4-20
 - accessing at file level, (S) *Sys Mgr Essentials*, 9-13
 - accessing for read and write operations, (S) *Sys Mgr Essentials*, 9-14
- ANSI names, (P) *File Appl*, 1-26
- append operation, (S) *Sys Mgr Essentials*, 9-18
- attributes, (P) *I/O User*, 3-6
- closing after opening for read access, (S) *Sys Mgr Essentials*, 9-17
- closing after opening for write access, (S) *Sys Mgr Essentials*, 9-18
- copying, (S) *Sys Mgr Essentials*, 9-21
- definition, (S) *Sys Mgr Essentials*, 8-7
- expiration, (P) *Rec Mgmt Util*, 4-15
- locating for read and write access, (S) *Sys Mgr Essentials*, 9-15
- modifying characteristics, (S) *Sys Mgr Essentials*, 9-8
- reading, (S) *Sys Mgr Essentials*, 9-17
- update operation, (S) *Sys Mgr Essentials*, 9-18
- writing to, (S) *Sys Mgr Essentials*, 9-18
- Tape file system
 - checking
 - continuation volume, (S) *Sys Mgr Essentials*, 8-41
 - expiration date field, (S) *Sys Mgr Essentials*, 9-18
 - locating files, (S) *Sys Mgr Essentials*, 9-15
 - overwriting existing information, (S) *Sys Mgr Essentials*, 9-17
 - protection on, (S) *Sys Mgr Essentials*, 8-19
 - writing files to tape volume, (S) *Sys Mgr Essentials*, 9-18
- Tape initializing
 - using REPLY/BLANK_TAPE, (G) *DCL N-Z, DCLII-42*
 - using REPLY/INITIALIZE_TAPE, (G) *DCL N-Z, DCLII-42*

Tape marks, (S) *Sys Mgr Essentials*, 8-6; (P) *I/O User*, 3-14, 3-17
 BOT, (P) *File Appl*, 1-20
 EOT, (P) *File Appl*, 1-20

Tape mass storage control protocol servers
 See TMSCP servers

Tape processing
 run-time options, (P) *File Appl*, 9-12 to 9-13

Tapes
 See also Dual-pathed tapes
 accessing file level, (S) *Sys Mgr Essentials*, 9-14
 ACP control function, (P) *I/O User*, 1-32, 3-12
 ACP create file operation, (P) *I/O User*, 1-25
 allocating drives, (S) *Sys Mgr Essentials*, 8-9, 9-22
 allocation class, (S) *VMScluster Sys*, 6-7
 ANSI data, (P) *File Appl*, 1-17
 ANSI standard, (P) *File Appl*, 1-17
 available function, (P) *I/O User*, 3-22
 basic concepts, (P) *File Appl*, 1-16
 basic concepts of, (S) *Sys Mgr Essentials*, 8-6
 blocks, (S) *Sys Mgr Essentials*, 8-6
 BOT marker, (P) *I/O User*, 3-16, 3-17
 bpi, (S) *Sys Mgr Essentials*, 8-6
 byte count
 read, (P) *I/O User*, 3-14
 write, (P) *I/O User*, 3-15
 cluster-accessible, (S) *VMScluster Sys*, 6-1
 clusterwide access to local, (S) *VMScluster Sys*, 6-15
 commands, (S) *Sys Mgr Essentials*, 8-27
 copying files from, (S) *Sys Mgr Essentials*, 9-21
 data check, (P) *I/O User*, 3-6, 3-14, 3-15
 data security erase function, (P) *I/O User*, 3-22
 deallocating drives, (G) *User*, 12-3; (S) *Sys Mgr Essentials*, 8-10
 default security elements, (S) *Security*, 5-6
 density, (P) *I/O User*, 3-21
 device characteristics, (P) *I/O User*, 3-8
 device characteristics for, (G) *DCL N-Z*, DCLII-171
 disabling operator status, (G) *DCL N-Z*, DCLII-43
 dismounting, (G) *DCL A-M*, DCLI-178; (S) *Sys Mgr Essentials*, 10-16
 DOS-11, (S) *Sys Mgr Essentials*, 9-24
 driver, (P) *I/O User*, 3-1
 DSA local device naming, (S) *Comparison*, 2-23
 dual-pathed, (S) *VMScluster Sys*, 6-14
 dual-ported, (S) *VMScluster Sys*, 6-2
 enabling operator status, (G) *DCL N-Z*, DCLII-43
 enabling write cache, (S) *Sys Mgr Essentials*, 8-24

Tapes (cont'd)

end-of-volume detection, (P) *I/O User*, 3-17
 EOF status, (P) *I/O User*, 3-14
 EOT marker, (P) *I/O User*, 3-16
 status, (P) *I/O User*, 3-14, 3-15, 3-17
 error recovery, (P) *I/O User*, 3-6
 establishing operational status for, (G) *DCL N-Z*, DCLII-121
 extended characteristics, (P) *I/O User*, 3-9
 features, (P) *I/O User*, 3-4
 file names, (S) *Sys Mgr Essentials*, 9-16
 files protection, (P) *Rec Mgmt Util*, 4-21
 file system, (S) *Sys Mgr Essentials*, 8-7
 function codes, (P) *I/O User*, 3-9, 3-10
 function modifiers
 IO\$M_DATACHECK, (P) *I/O User*, 3-6, 3-15
 IO\$M_ERASE, (P) *I/O User*, 3-15
 IO\$M_INHEXTGAP, (P) *I/O User*, 3-7
 IO\$M_INHRETRY, (P) *I/O User*, 3-7
 IO\$M_NOWAIT, (P) *I/O User*, 3-16, 3-18
 getting information about, (S) *Sys Mgr Essentials*, 7-16
 I/O functions, (P) *I/O User*, 3-9
 See also ACP-QIO interface
 arguments, (P) *I/O User*, 3-12
 IO\$_ACPCONTROL, (P) *I/O User*, 1-33
 I/O status block, (P) *I/O User*, 3-23
 initializing, (G) *User*, 12-5; (G) *DCL A-M*, DCLI-248; (S) *Sys Mgr Essentials*, 10-13
 initializing from within a program, (P) *Sys Svc II*, SYS2-113
 example, (P) *Concepts*, 9-36
 IRG (interrecord gap), (S) *Sys Mgr Essentials*, 8-6
 label format, (G) *User*, 12-8; (S) *Sys Mgr Essentials*, 8-24
 labeling, (S) *Sys Mgr Essentials*, 10-21
 loading on drive, (S) *Sys Mgr Essentials*, 9-22
 management
 tasks, (S) *Sys Mgr Essentials*, 7-16
 managing security profiles, (S) *Security*, 5-6
 master adapters, (P) *I/O User*, 3-5
 modify function, (P) *I/O User*, 3-22
 modifying device characteristics, (S) *Sys Mgr Essentials*, 7-16, 8-42
 modifying RMS defaults for file operations, (G) *DCL N-Z*, DCLII-209
 mounting, (S) *Sys Mgr Essentials*, 10-15; (S) *Sys Mgmt Util M-Z*, 2-4
 mounting ANSI-labeled, (S) *Sys Mgmt Util M-Z*, 2-21, 2-23
 mounting multiple foreign volumes, (S) *Sys Mgmt Util M-Z*, 2-26
 MTACP process, (S) *Sys Mgr Essentials*, 8-6
 no support for SCSI retension, (G) *V6.2 New Feat*, 3-8

Tapes (cont'd)

- overriding overwrite protection on, (G) *DCL A-M*, DCLI-254
- overriding protection checks, (S) *Sys Mgmt Util M-Z*, 2-27
- pack acknowledge function, (P) *I/O User*, 3-22
- parity, (P) *I/O User*, 3-21
- positioning, (P) *I/O User*, 1-33
- preparing for UETP, (S) *Sys Mgr Tuning*, 17-2, 17-5, 17-6
- programming example, (P) *I/O User*, 3-23
- protection, (S) *Sys Mgr Essentials*, 8-14
- quotas, (P) *I/O User*, 3-10
- read function, (P) *I/O User*, 3-13
- reading from, (S) *Sys Mgr Essentials*, 9-17
- read reverse function, (P) *I/O User*, 3-14
- record blocking, (S) *Sys Mgr Essentials*, 8-6
 - advantages, (S) *Sys Mgr Essentials*, 8-7
- record size
 - specifying, (S) *Sys Mgr Essentials*, 8-26
- restricted access, (S) *VMScluster Sys*, 6-1
- retensioning, (G) *DCL N-Z*, DCLII-171
- rewind function, (P) *I/O User*, 3-16
- rewind offline function, (P) *I/O User*, 3-18
- save set, (S) *Sys Mgr Essentials*, 10-6
- SCSI, (G) *V6.2 New Feat*, 3-8
- sequential organization of, (S) *Sys Mgr Essentials*, 8-6
- served by TMSCP, (S) *VMScluster Sys*, 6-1
- set characteristics function, (P) *I/O User*, 3-19
- set mode function, (P) *I/O User*, 3-19, 3-21
- setting allocation class, (S) *VMScluster Sys*, 6-9, 6-14
- skip file function, (P) *I/O User*, 3-16
- skip record function, (P) *I/O User*, 3-16
- slave formatter, (P) *I/O User*, 3-5
- specifying block size, (S) *Sys Mgr Essentials*, 8-24
- specifying block size for, (S) *Sys Mgmt Util M-Z*, 2-11
- specifying density for, (S) *Sys Mgmt Util M-Z*, 2-19
- specifying record size for, (S) *Sys Mgmt Util M-Z*, 2-33
- specifying volume density, (G) *DCL A-M*, DCLI-250
- specifying volume label for, (S) *Sys Mgr Essentials*, 10-14
- standard-labeled
 - mounting, (S) *Sys Mgr Essentials*, 8-24
- starting position, (P) *Rec Mgmt Util*, 4-20
- stopping runaway, (G) *DCL A-M*, DCLI-249
- streaming tape systems, (P) *I/O User*, 3-7
- structure of, (S) *Sys Mgr Essentials*, 8-6
- supported devices, (P) *I/O User*, 3-1
- SYS\$GETDVI returns, (P) *I/O User*, 3-8
- tape controllers, (P) *I/O User*, 3-1
- tape mark, (P) *I/O User*, 3-14, 3-16, 3-17

Tapes (cont'd)

- testing with UETP, (S) *Sys Mgr Tuning*, 17-31, 17-33
- thrashing, (P) *I/O User*, 3-7
- TMSCP magnetic tapes, (P) *I/O User*, 3-1
- TMSCP served, (G) *V6.2 New Feat*, 3-8
- 9-track drive, (P) *File Appl*, 1-18
- TU58 magnetic tape
 - See Disks, TU58 magnetic tape
- TUDRIVER, (S) *VMScluster Sys*, 1-4, 2-18
- UETP test image, (S) *Sys Mgr Tuning*, 17-34
- unload function, (P) *I/O User*, 3-18
- volume label
 - overriding protection, (S) *Sys Mgr Essentials*, 8-25
- volume sets, (S) *Sys Mgr Essentials*, 8-6
- write cache
 - enabling, (S) *Sys Mgr Essentials*, 8-24
- write end-of-file function, (P) *I/O User*, 3-17
- write function, (P) *I/O User*, 3-15
- writing files to, (S) *Sys Mgr Essentials*, 9-22
- Tape servers, (G) *SW Overview*, 6-17
 - TMSCP on LAN configurations, (S) *VMScluster Sys*, 3-6
 - VMScluster, (P) *Environment*, 3-3
- Tape volumes, (S) *Sys Mgr Essentials*, 9-23
 - See also Disk volumes, Volumes, and Volume sets
 - accessibility protection, (S) *Sys Mgr Essentials*, 8-19
 - accessing files on, (S) *Sys Mgr Essentials*, 9-13, 9-17
 - access to, (S) *Sys Mgr Essentials*, 9-14
 - ANSI, (P) *File Appl*, 1-17, 1-20
 - ANSI format, (P) *File Appl*, 1-18
 - continuation, (S) *Sys Mgr Essentials*, 8-39
 - copying files, (S) *Sys Mgr Essentials*, 9-21
 - from, (S) *Sys Mgr Essentials*, 9-21
 - to, (S) *Sys Mgr Essentials*, 9-20
 - to and from, (S) *Sys Mgr Essentials*, 9-24
 - deallocating, (S) *Sys Mgr Essentials*, 9-23
 - dismounting, (S) *Sys Mgr Essentials*, 9-23
 - files on, (P) *File Appl*, 1-21
 - file specifications, (G) *User*, 4-11
 - file-structured, (S) *Sys Mgr Essentials*, 8-20
 - foreign, (S) *Sys Mgr Essentials*, 8-20
 - header labels, (S) *Sys Mgr Essentials*, 8-24
 - initializing, (S) *Sys Mgr Essentials*, 9-22
 - mounting, (S) *Sys Mgr Essentials*, 8-20, 8-21, 8-24, 8-27; (P) *Concepts*, 9-33
 - mounting volume sets, (S) *Sys Mgr Essentials*, 8-36
 - mounting with automatic switching disabled, (S) *Sys Mgr Essentials*, 8-40
 - mount verification, (S) *Sys Mgr Essentials*, 8-58
 - overriding UIC, (S) *Sys Mgr Essentials*, 8-25

Tape volumes (cont'd)

- private, (S) *Sys Mgr Essentials*, 8-9
- reading attributes of header labels, (S) *Sys Mgr Essentials*, 9-17
- reading files on, (S) *Sys Mgr Essentials*, 9-17
- searching for files on, (S) *Sys Mgr Essentials*, 9-5
- specifying record size, (S) *Sys Mgr Essentials*, 8-26
- standard-labeled, (S) *Sys Mgr Essentials*, 9-21
 - copying files from, (S) *Sys Mgr Essentials*, 9-21
- wildcard characters supported, (S) *Sys Mgr Essentials*, 9-16
- write-enabling, (S) *Sys Mgr Essentials*, 8-28
- write-locking, (S) *Sys Mgr Essentials*, 8-37
- write rings, (S) *Sys Mgr Essentials*, 8-37
- writing files to, (S) *Sys Mgr Essentials*, 9-22
- writing to files on, (S) *Sys Mgr Essentials*, 9-18
- TAPE_ALLOCLASS system parameter, (S) *VMScluster Sys*, 6-9, A-3
- /TAPE_EXPIRATION qualifier
 - in Backup utility, (S) *Sys Mgmt Util A-L*, 7-61
- TAPE_MVTIMEOUT system parameter, (S) *Sys Mgr Essentials*, 8-60, 8-62
- TARGET attribute, (P) *Rec Mgmt Util*, 4-37
- Target-initiated downline load, (S) *DECnet Mgmt*, 4-2
- Target node name, (S) *Sys Mgmt Util A-L*, 13-54
- Target nodes, (S) *DECnet Mgmt*, 4-1
 - starting bootstrap and self-load program, (S) *DECnet Mgmt Util*, 3-156
 - through a specified circuit, (S) *DECnet Mgmt Util*, 3-158
- testing, (S) *DECnet Mgmt Util*, 3-54
- Target port name, (S) *Sys Mgmt Util A-L*, 13-54
- Target service name, (S) *Sys Mgmt Util A-L*, 13-54
- Target task, (S) *DECnet Mgmt*, 8-11
- Task ID, (P) *Debugger*, 3-26, 16-7, 16-13, 16-15, 16-16, 16-20
- Tasking (multithread) programs
 - active task, (P) *Debugger*, 3-26, 16-11
 - changing task characteristics, (P) *Debugger*, 3-27, 16-23
 - comparison of task and DECthreads
 - terminology, (P) *Debugger*, 16-2
 - controlling and monitoring execution, (P) *Debugger*, 16-25
 - controlling task switching, (P) *Debugger*, 16-24
 - deadlock condition, (P) *Debugger*, 16-31
 - debugging, (P) *Debugger*, 3-25, 16-1
 - displaying task information, (P) *Debugger*, 3-26, 16-16
 - environment task, (P) *Debugger*, 16-7
 - event facility, (P) *Debugger*, 16-28
 - eventpoints, (P) *Debugger*, 16-25
 - monitoring events, (P) *Debugger*, 16-28

Tasking (multithread) programs (cont'd)

- obtaining priority of task or thread, (P) *Debugger*, 16-16, 16-20
- predefined breakpoint, (P) *Debugger*, 16-30
- sample Ada program for debugging, (P) *Debugger*, 16-6
- sample C program for debugging, (P) *Debugger*, 16-2
- SET EVENT_FACILITY command, (P) *Debugger*, 16-30
- SET TASK command, (P) *Debugger*, 16-23
- setting breakpoint, (P) *Debugger*, 16-25
- setting priority of task or thread, (P) *Debugger*, 3-27, 16-23, 16-32
- setting time-slice value, (P) *Debugger*, 16-24
- setting tracepoint, (P) *Debugger*, 16-25
- setting watchpoint, (P) *Debugger*, 16-25
- SHOW EVENT_FACILITY command, (P) *Debugger*, 16-30
- SHOW TASK command, (P) *Debugger*, 16-16
- specifying task body, (P) *Debugger*, 16-12
- specifying task or thread, (P) *Debugger*, 16-11
- stack checking, (P) *Debugger*, 16-33
- state of task or thread, (P) *Debugger*, 3-26, 16-16, 16-20
- substate of task or thread, (P) *Debugger*, 3-26, 16-16, 16-20
- task built-in symbols, (P) *Debugger*, 16-14
- task event, (P) *Debugger*, 16-28
- task ID, (P) *Debugger*, 16-7, 16-13, 16-15, 16-16, 16-20
- task object, (P) *Debugger*, 16-12
- visible task, (P) *Debugger*, 16-11
- Tasking View, (P) *Debugger*, 3-26
- TASK object
 - default access account, (S) *DECnet Intro*, 3-13
- /TASK qualifier, (P) *Debugger*, 16-13
- Tasks, (P) *Debugger*, 3-25
 - declaring for network, (S) *DECnet Mgmt*, 8-8
 - definition, (S) *DECnet Mgmt*, 1-17
 - downline load, (S) *DECnet Mgmt*, 4-14
 - general purpose, (S) *DECnet Mgmt*, 4-16
 - identifier in specification, (S) *DECnet Mgmt*, 1-20
 - installation, (S) *DECnet Mgmt*, 4-16
 - remote, (S) *DECnet Intro*, 2-14
 - remote execution, (S) *DECnet Intro*, 2-12
 - source, (S) *DECnet Mgmt*, 8-13
 - specification, (S) *DECnet Mgmt*, 1-20
 - specification for task, (S) *DECnet Mgmt*, 1-20
 - specification over the network, (S) *DECnet Mgmt*, 1-20
 - specification string, (S) *DECnet Mgmt*, 1-20, 8-9, 8-15, 8-27
 - target, (S) *DECnet Mgmt*, 8-13, 8-21
- Task specification strings, (S) *DECnet Intro*, 2-14
 - on networks, (G) *User*, 4-8

- Task state, (P) *Debugger*, 3-26, 16-16, 16-20
- Task substate, (P) *Debugger*, 3-26, 16-16, 16-20
- Task switching, (P) *Debugger*, 16-24, 16-27
- Task-to-task communications, (G) *Compatibility*, 2-6; (S) *Comparison*, 6-2; (S) *DECnet Intro*, 2-12; (S) *DECnet Mgmt*, 1-2, 1-17, 8-1, 8-15, 8-24
 - nontransparent, (S) *DECnet Intro*, 2-14; (S) *DECnet Mgmt*, 8-7, 8-8, 8-24
 - nontransparent example, (S) *DECnet Mgmt*, 8-43
 - transparent, (S) *DECnet Intro*, 2-14; (S) *DECnet Mgmt*, 8-1, 8-15
 - transparent FORTRAN example, (S) *DECnet Mgmt*, 8-40
- \$TASK_BODY, (P) *Debugger*, 16-13, 16-26
- TCB (trusted computing base), (S) *Security*, C-2, C-3, C-5
- TCP/IP (Transmission Control Protocol/Internet Protocol), (G) *SW Overview*, 1-11; (P) *Environment*, 3-2
 - applications, (G) *V6.2 New Feat*, 3-23; (S) *Sys Mgr Tuning*, 21-13; (S) *TCP/IP*, 1-1, 3-1
 - capabilities, (S) *TCP/IP*, 1-6
 - development of, (S) *TCP/IP*, 1-5
 - gateways, (S) *TCP/IP*, 1-3
 - hosts, (S) *TCP/IP*, 1-2
 - layers, (S) *TCP/IP*, 2-1, 2-3
 - model, (S) *TCP/IP*, 2-1
 - network connections, (G) *SW Overview*, 2-11
 - networking products, (G) *SW Overview*, 1-9
 - networks, (G) *SW Overview*, 6-6
 - network transport, (G) *SW Overview*, 6-24
 - OpenVMS layered products, (S) *TCP/IP*, 1-4, 4-1, A-1
 - packet-switching network, (S) *TCP/IP*, 1-2
 - protocols, (G) *SW Overview*, 1-10, 2-11, 6-6; (S) *TCP/IP*, 1-1
 - server, (S) *TCP/IP*, 1-2
 - standards, (S) *TCP/IP*, 1-6
 - UNIX connections, (G) *SW Overview*, 2-6
- TCP/IP Services for OpenVMS, (G) *SW Overview*, 1-10, 6-2, 6-6; (G) *Compatibility*, 2-1, 2-2, 2-3, 2-4; (P) *Environment*, 3-2
- TDF (time differential factor), (S) *Sys Mgr Essentials*, 5-34 to 5-36
 - how to set, (S) *Sys Mgr Essentials*, 5-34
 - tables of, (S) *Sys Mgr Tuning*, B-1
- TEAMDATA, (G) *SW Overview*, 7-5, 7-17
- Teamwork, (S) *Dependable*, 3-15
- TEBs (thread environment blocks), (P) *Calling Std*, 3-58
- Technical support centers, (G) *Compatibility*, 3-7
- TECO editor, (G) *DCL A-M*, DCLI-198; (G) *SW Overview*, 4-5
 - Refer also to the *PDP-11 TECO User's Guide*
- TEF option, (P) *Rec Mgmt Util*, 4-24
- Telephone lines, (S) *DECnet Intro*, 1-2, 1-12
 - dialup, (S) *DECnet Intro*, 1-7, 3-19
 - leased, (S) *DECnet Intro*, 1-7
- TELL command, (S) *DECnet Mgmt Util*, 3-154
- TELL prefix
 - description, (S) *DECnet Mgmt*, 3-6
 - for NCP command SHOW, (S) *DECnet Intro*, 4-3
- TELNET, (S) *Sys Mgr Tuning*, 21-13; (S) *TCP/IP*, 2-5
 - service, (S) *TCP/IP*, 3-2, 5-1
- telnet command, (S) *TCP/IP*, 3-2
- Temperature as an environmental factor of dependable computing, (S) *Dependable*, 5-3
- Template devices, security elements of, (S) *Security*, 5-7
- Template files
 - for site-specific startup, (S) *Sys Mgr Essentials*, 5-3
- Template profiles
 - See Security profiles
- TEMPORARY, delete option, (P) *File Appl*, 4-31
- TEMPORARY attribute, (P) *Rec Mgmt Util*, 4-24
- Temporary defaults in input file lists, (G) *User*, 5-6
- Temporary files, (P) *Rec Mgmt Util*, 2-18, 4-19
- Temporary mailboxes, (P) *I/O User*, 4-4
- TEMPORARY option, (P) *File Appl*, 4-31
- Temporary working directory
 - specifying alternate working device for, (S) *Sys Mgr Essentials*, 3-14
- Terminal characteristics, (P) *Concepts*, 9-29
- TERMINAL command
 - in SYSGEN, (S) *Sys Mgmt Util M-Z*, 5-31
- Terminal connections
 - to remote console, (S) *DECnet Mgmt*, 4-18
- Terminal device record processing options, (P) *RMS Ref*, 6-20
- Terminal device widths, (P) *Concepts*, 7-6
- Terminal echo, (P) *Concepts*, 7-39
 - disabling, (P) *Concepts*, 7-40
- Terminal emulation, (S) *TCP/IP*, 3-2
- Terminal emulators, (S) *Security*, 12-18; (S) *DECnet Intro*, 3-26; (S) *DECnet Mgmt*, 1-9, 5-16
 - creating, (G) *DCL A-M*, DCLI-99
- Terminal Fallback Facility (TFF), (S) *Comparison*, 2-28
- Terminal Fallback Utility (TFU), (S) *Comparison*, 2-28
 - Refer also to the *OpenVMS Terminal Fallback Utility Manual*
- Terminal I/Os, (P) *Modular Proc*, 2-15
 - example, (P) *Concepts*, 9-24
 - reducing interrupts, (S) *VAX Perform*, 5-15

Terminal keys

defining for SDA, (P) *VAX SDA*, SDA-48

Terminal lines, (S) *Security*, 12-17

asynchronous DECnet, (S) *DECnet Intro*, 3-19
conversion to DECnet line, (S) *DECnet Mgmt*,
1-9, 2-13, 5-11

Terminal operations

improper handling, (S) *VAX Perform*, 4-29; (S)
Alpha Perform, 14-4

in relation to CPU limitation, (S) *VAX Perform*,
4-29; (S) *Alpha Perform*, 14-4

in relation to I/O limitation, (S) *VAX Perform*,
4-29; (S) *Alpha Perform*, 14-4

Terminal queues, (S) *Sys Mgr Essentials*, 13-3

Terminal read operations

RAB\$L_ROP field options, (P) *RMS Ref*, 17-1

Terminals

See also Virtual terminals

ANSI CRT terminal, (P) *I/O User*, 5-23

autobaud detection, (P) *I/O User*, 5-19, 5-23

automatic switching of line, (S) *DECnet Intro*,
3-27

baud rate, (P) *I/O User*, 5-19, 5-23, 5-42

baud rates

lowering, (S) *VAX Perform*, 5-16

bell (Ctrl/G), (P) *I/O User*, 5-9

breaking dialup connection, (G) *User*, 2-26;
(S) *Security*, 3-20

broadcast messages, (P) *I/O User*, 5-19, 5-22,
5-24, 5-49

C2 system restrictions, (S) *Security*, C-7, C-8

carriage control, (P) *I/O User*, 5-38

clearing DECwindows screen, (S) *Security*,
3-15

clearing the screen, (G) *User*, 2-25, 19-7; (S)
Security, 3-15, 3-19

command line editing, (P) *I/O User*, 5-3, 5-37

command recall (Ctrl/B), (P) *I/O User*, 5-4,
5-6

console, (S) *Sys Mgr Essentials*, 2-21

control and data signals, (P) *I/O User*, 5-16

control characters, (G) *User*, D-3; (P) *I/O*
User, 5-4 to 5-7, 5-9, 5-28

numeric values, (P) *I/O User*, B-1

control keys, (G) *User*, D-1

control key sequences, (P) *I/O User*, 5-8

controlling access, (S) *Security*, 3-2, 7-14

controlling access through system passwords,
(S) *Sys Mgr Essentials*, 11-3

controlling access to, (G) *User*, 2-5

cursor movement, (P) *I/O User*, 5-3, 5-6, 5-23

default characteristics, (G) *DCL A-M*,
DCLI-410

default security elements, (S) *Security*, 5-6

delete character, (P) *I/O User*, 5-3

delete line (Ctrl/U), (P) *I/O User*, 5-5, 5-28

determining physical type, (S) *Sys Mgr*
Essentials, 7-12

Terminals (cont'd)

device characteristics, (P) *I/O User*, 5-20, 5-21

categories, (P) *I/O User*, 5-27

changing, (P) *I/O User*, 5-43

extended, (P) *I/O User*, 5-23

dial-up

characteristic, (P) *I/O User*, 5-22

lines, (P) *I/O User*, 5-13, 5-25, 5-44

support, (P) *I/O User*, 5-13

dialup login, (G) *User*, 2-9; (S) *Security*, 3-5

Digital CRT terminal, (P) *I/O User*, 5-24, 5-25

discard output (Ctrl/O), (P) *I/O User*, 5-5,
5-28, 5-38

disconnected, (G) *User*, 18-8

disconnecting without terminating a process,
(S) *Sys Mgr Essentials*, 7-11

displaying characteristics of, (G) *DCL N-Z*,
DCLII-344

displaying files at, (G) *DCL N-Z*, DCLII-418

documenting owners of, (S) *Sys Mgr Essentials*,
7-10

driver, (P) *I/O User*, 5-1

duplex modes, (P) *I/O User*, 5-10, 5-13

enable Ctrl/C AST, (P) *I/O User*, 5-44

enable Ctrl/Y AST, (P) *I/O User*, 5-44

escape sequences, (P) *I/O User*, 5-7, 5-80

ANSI, (P) *I/O User*, B-9

Digital-private, (P) *I/O User*, B-9

overflow size (item code), (P) *I/O User*,
5-32

establishing as spooled, (G) *DCL N-Z*,
DCLII-121

extended characteristics, (P) *I/O User*, 5-23

failing to respond, (S) *Security*, 3-3

failover, (S) *Dependable*, 8-52, 8-55

fallback conversion, (P) *I/O User*, 5-11, 5-25,
5-44

features, (P) *I/O User*, 5-2

for debugger input/output, separate, (P)

Debugger, 13-5

using DECterm window, (P) *Debugger*, 2-9

foreign

input support, (P) *SMG\$*, 5-21

form feed, (P) *I/O User*, 5-22, 5-37

for security alarms, (S) *Sys Mgr Tuning*, 18-29

frame size, (P) *I/O User*, 5-43

function codes, (P) *I/O User*, 5-27, A-6

function modifiers

See also Terminals

IO\$M_BRDCST, (P) *I/O User*, 5-49, 5-80

IO\$M_BREAKTHRU, (P) *I/O User*, 5-11,
5-38

IO\$M_CANCTRLLO, (P) *I/O User*, 5-5,
5-38

IO\$M_CTRLCAST, (P) *I/O User*, 5-44

IO\$M_CTRLYAST, (P) *I/O User*, 5-5,
5-13, 5-44

IO\$M_CVTLOW, (P) *I/O User*, 5-29

Terminals

function modifiers (cont'd)

IO\$M_DSABLMBX, (P) *I/O User*, 5-29
IO\$M_ENABLMBX, (P) *I/O User*, 5-38
IO\$M_ESCAPE, (P) *I/O User*, 5-7, 5-29
IO\$M_EXTEND, (P) *I/O User*, 5-29, 5-31
IO\$M_HANGUP, (P) *I/O User*, 5-44
IO\$M_INCLUDE, (P) *I/O User*, 5-20, 5-45, 5-48
IO\$M_LOOP, (P) *I/O User*, 5-47
IO\$M_LT_CONNECT, (P) *I/O User*, 5-51
IO\$M_LT_DISCON, (P) *I/O User*, 5-51
IO\$M_LT_SENSEMODE, (P) *I/O User*, 5-51
IO\$M_LT_SETMODE, (P) *I/O User*, 5-51
IO\$M_MAINT, (P) *I/O User*, 5-45, 5-47
IO\$M_NOECHO, (P) *I/O User*, 5-9, 5-11, 5-26, 5-29
IO\$M_NOFILTR, (P) *I/O User*, 5-29
IO\$M_NOFORMAT, (P) *I/O User*, 5-11, 5-38, 5-47
IO\$M_OUTBAND, (P) *I/O User*, 5-48
IO\$M_PURGE, (P) *I/O User*, 5-29
IO\$M_RD_MODEM, (P) *I/O User*, 5-79
IO\$M_REFRESH, (P) *I/O User*, 5-38
IO\$M_SET_MODEM, (P) *I/O User*, 5-45
IO\$M_TIMED, (P) *I/O User*, 5-29
IO\$M_TRMNOECHO, (P) *I/O User*, 5-30
IO\$M_TT_ABORT, (P) *I/O User*, 5-20, 5-48
IO\$M_TYPEAHDCNT, (P) *I/O User*, 5-78
IO\$M_UNLOOP, (P) *I/O User*, 5-48
hangup, (P) *I/O User*, 5-13, 5-17, 5-18, 5-25, 5-44, 5-77
hard copy
 disposing of output, (G) *User*, 2-26; (S) *Security*, 3-20
I/O functions
 CTDRIVER, (P) *I/O User*, 5-37
 IO\$ READLBLK, (P) *I/O User*, 5-28
 IO\$ READPROMPT, (P) *I/O User*, 5-28
 IO\$ READVBLK, (P) *I/O User*, 5-28
 IO\$ SENSECHAR, (P) *I/O User*, 5-77
 IO\$ SENSEMODE, (P) *I/O User*, 5-77
 IO\$ SETCHAR, (P) *I/O User*, 5-40
 IO\$ SETMODE, (P) *I/O User*, 5-40
 IO\$ TTY_PORT, (P) *I/O User*, 5-51
 IO\$ WRITELBLK, (P) *I/O User*, 5-37
 IO\$ WRITEPBLK, (P) *I/O User*, 5-37
 IO\$ WRITEVBLK, (P) *I/O User*, 5-37
I/O status block, (P) *I/O User*, 5-80
initiate login, (P) *I/O User*, 5-10
input processing, (P) *I/O User*, 5-3
insert/overstrike (Ctrl/A), (P) *I/O User*, 5-3, 5-7
interrupt (Ctrl/Y), (P) *I/O User*, 5-5
item codes, (P) *I/O User*, 5-32 to 5-36
itemlist read, (P) *I/O User*, 5-31

Terminals

itemlist read (cont'd)

 item codes, (P) *I/O User*, 5-32 to 5-36
 item descriptor, (P) *I/O User*, 5-31
keeping sessions on multiple, (S) *Sys Mgr Essentials*, 7-11
LAT, (S) *Sys Mgr Essentials*, 7-12
 determining characteristics of, (S) *Sys Mgr Essentials*, 7-12
 disconnecting, (S) *Sys Mgr Essentials*, 7-11
LAT line, (P) *I/O User*, 5-1
LAT port driver, (P) *I/O User*, 5-49
 application services creation, (P) *I/O User*, 5-75
 I/O functions, (P) *I/O User*, 5-51
LAT rejection codes, (P) *I/O User*, 5-83
limiting access, (S) *Security*, 8-31
line editing, (P) *I/O User*, 5-3, 5-25
line feed, (P) *I/O User*, 5-37
lines for modems, security of, (S) *Security*, 8-31
line terminators, (P) *I/O User*, 5-9
logout considerations, (G) *User*, 2-25; (S) *Security*, 3-19
mailbox, (P) *I/O User*, 5-18, 5-38
 message format, (P) *I/O User*, 5-19
 message types, (P) *I/O User*, 5-19
managing
 tasks for, (S) *Sys Mgr Essentials*, 7-9
manual switching of line, (S) *DECnet Intro*, 3-27
modem
 characteristic, (P) *I/O User*, 5-22
 control signals, (P) *I/O User*, 5-16
 data signals, (P) *I/O User*, 5-16
 protocol, (P) *I/O User*, 5-14
 sense signals, (P) *I/O User*, 5-79
 signal control, (P) *I/O User*, 5-13
modem signal control, (P) *I/O User*, 5-13
modifying characteristics of, (G) *DCL N-Z*, DCLII-216
modifying control-key echo strings, (S) *Sys Mgmt Util M-Z*, 5-31
modifying security profiles, (S) *Security*, 5-7
no type-ahead, (P) *I/O User*, 5-22
operator
 See Operator terminals
out-of-band
 See also Out-of-band AST
 characters, (P) *I/O User*, 5-20
output
 CTDRIVER, (P) *I/O User*, 5-11
 RTPAD, (P) *I/O User*, 5-11
 SET HOST, (P) *I/O User*, 5-11
output formatting, (P) *I/O User*, 5-11, 5-27
output processing, (P) *I/O User*, 5-10
page length and width, (P) *I/O User*, 5-41, 5-78

Terminals (cont'd)

parity flag, (P) *I/O User*, 5-42
 PASTHRU mode, (P) *I/O User*, 5-9, 5-11, 5-26, 5-28
 port, (S) *Security*, 12-17; (S) *DECnet Intro*, 3-26
 preparing for UETP, (S) *Sys Mgr Tuning*, 17-3, 17-5, 17-8, 17-14
 process preservation, (P) *I/O User*, 5-17
 programming examples, (P) *I/O User*, 5-84
 protocol, (P) *I/O User*, 5-14
 read verify, (P) *I/O User*, 5-7, 5-36
 receive speed, (P) *I/O User*, 5-42
 redisplay data (Ctrl/R), (P) *I/O User*, 5-6, 5-28
 ReGIS graphics, (P) *I/O User*, 5-26
 remote, (S) *Sys Mgr Essentials*, 7-11
 requiring a system password, (G) *User*, 2-11; (S) *Security*, 3-8
 restart data (Ctrl/Q), (P) *I/O User*, 5-6
 security alarms and, (S) *Security*, 9-15
 sending alarm messages to, (S) *Sys Mgmt Util A-L*, 1-6
 sending messages to, (G) *DCL N-Z, DCLII-41*
 sense characteristics function, (P) *I/O User*, 5-77
 sense mode function, (P) *I/O User*, 5-77
 serial line multiplexer, (P) *I/O User*, 5-1
 session logging, (S) *Security*, 6-6
 set characteristics function, (P) *I/O User*, 5-40
 arguments, (P) *I/O User*, 5-40
 set mode function, (P) *I/O User*, 5-40
 arguments, (P) *I/O User*, 5-40
 SET TERMINAL DCL command, (P) *I/O User*, 5-4, 5-19, 5-26
 SET TERMINAL/INQUIRE command, (S) *Sys Mgr Essentials*, 7-12
 setting characteristics, (S) *Sys Mgr Essentials*, 7-9
 default values, (S) *Sys Mgr Essentials*, 7-10
 in system startup, (S) *Sys Mgr Essentials*, 5-12, 7-10
 simulating users for UETP, (S) *Sys Mgr Tuning*, 17-34
 SIXEL graphics, (P) *I/O User*, 5-26
 special keys, (G) *User*, D-1, D-3
 special operating modes, (P) *I/O User*, 5-10
 status (Ctrl/T), (P) *I/O User*, 5-7
 status returns, (P) *I/O User*, A-7
 stop data (Ctrl/S), (P) *I/O User*, 5-6
 stopping and starting displays, (G) *User*, 3-20
 supported devices, (P) *I/O User*, 5-1
 support for SET and SHOW TERMINAL commands, (P) *SMG\$, 5-22*
 SYS\$GETDVI returns, (P) *I/O User*, 5-20
 system password, (P) *I/O User*, 5-26
 system password, requirement for, (G) *User*, 2-5; (S) *Security*, 3-3

Terminals (cont'd)

tab
 Ctrl/I, (P) *I/O User*, 5-6
 mechanical, (P) *I/O User*, 5-22
 stops, (P) *I/O User*, 5-37
 terminator mask, (P) *I/O User*, 5-30, 5-31
 testing with UETP, (S) *Sys Mgr Tuning*, 17-31, 17-33
 third party
 support for, (P) *SMG\$, 5-1*
 time (Ctrl/T), (P) *I/O User*, 5-7
 transmit speed, (P) *I/O User*, 5-42
 TTY_DIALTYPE SYSGEN parameter, (P) *I/O User*, 5-13, 5-16, 5-17
 type-ahead, (P) *I/O User*, 5-9, 5-18, 5-21, 5-78
 alternate buffer, (P) *I/O User*, 5-23
 UETP output, (S) *Sys Mgr Tuning*, 17-33
 UETP test image, (S) *Sys Mgr Tuning*, 17-34
 unsolicited data, (P) *I/O User*, 5-18
 usage restrictions, (S) *Security*, 8-31
 user, in C2 systems, (S) *Security*, C-9
 virtual, (G) *User*, 2-8, 18-8, 18-9; (S) *Security*, 7-25
 VT200 series function keys, (G) *User*, D-1
 VT300 series function keys, (G) *User*, D-1
 write breakthrough function, (P) *I/O User*, 5-38
 writing data to, (G) *User*, 16-9
 XON/XOFF control, (P) *I/O User*, 5-26
 Terminal Server Manager
 See TSM
 Terminal servers, (S) *Sys Mgr Tuning*, 24-5; (S) *DECnet Intro*, 1-7
 DECservers, (G) *SW Overview*, 6-8
 defined, (S) *Sys Mgr Tuning*, 24-1
 multiprotocol, (G) *SW Overview*, 6-8
 on Ethernet, (S) *DECnet Mgmt*, 1-10
 on OpenVMS system, (S) *Sys Mgr Tuning*, 24-8
 Terminal sessions
 logging in, (G) *DCL A-M, DCLI-410*
 logging out, (G) *DCL A-M, DCLI-414*
 Terminal timeouts, (P) *Concepts*, 7-40
 /TERMINATE qualifier, (P) *Debugger*, 12-8; (P) *Alpha SDA*, SDA-43; (P) *VAX SDA*, SDA-50
 Terminating
 a remote session, (S) *DECnet Intro*, 3-3
 dynamic asynchronous link, (S) *DECnet Intro*, 3-28
 /TERMINATING qualifier, (P) *Debugger*, 14-13
 Terminating signals, (P) *DECthreads*, A-5
 Termination mailboxes, (P) *Concepts*, 3-47, 9-43
 Termination messages
 format of, (P) *Sys Svc I*, SYS1-147
 Terminations
 debugging session, (P) *Debugger*, 5-10, 14-10
 execution of handlers at, (P) *Debugger*, 13-16

Terminations (cont'd)

- multiprocess program, (P) *Debugger*, 14-9, 14-10, 14-13
- of command procedure, (G) *DCL A-M*, DCLI-222
- of GOSUB subroutine, (G) *DCL N-Z*, DCLII-51
- of terminal session, (G) *DCL A-M*, DCLI-414
- program, (P) *Debugger*, 2-4
- programs, (P) *Debugger*, 5-9

Terminator

- variations, (P) *File Appl*, 3-13

Terminator character bit mask, (P) *I/O User*, 5-30

Terminator characters

- used to delimit stream records, (P) *File Appl*, 2-13

Terminators, (P) *SMG\$*, 3-3

- See also I/O (input/output)
- codes, (P) *SMG\$*, 3-4
- echos, (P) *Concepts*, 7-24
- file, (P) *Concepts*, 9-31
- for SCSI, (G) *V6.2 New Feat*, 7-8
- record, (P) *Concepts*, 9-31

TERMTABLE.EXE file, (P) *SMG\$*, 5-1, 5-16

- creating, (P) *SMG\$*, 5-20

TERMTABLE.TXT file, (P) *SMG\$*, 5-1, 5-16

Terse report

- example, (S) *Sys Mgmt Util A-L*, 9-23

Test and set instructions, (P) *Modular Proc*, 3-18

Testing

- application dependability, (S) *Dependable*, 8-33 to 8-34
- command procedures, (G) *User*, 15-14
- DECnet hardware and software with UETP, (S) *DECnet Intro*, 3-29
- for software dependability, (S) *Dependable*, 3-10
- the network, (S) *DECnet Mgmt*, 7-1; (S) *DECnet Mgmt Util*, 4-1
- the value of an expression, (G) *DCL A-M*, DCLI-245

Testing new procedures, (P) *Modular Proc*, 4-1

- black box, (P) *Modular Proc*, 4-2
- integration, (P) *Modular Proc*, 4-1, 4-5
- language independence, (P) *Modular Proc*, 4-1, 4-4
- modularity, (P) *Modular Proc*, 4-1
- reentrancy, (P) *Modular Proc*, 4-6
- regression, (P) *Modular Proc*, 6-1
- unit, (P) *Modular Proc*, 4-1
- white box, (P) *Modular Proc*, 4-3

Test Manager, (G) *SW Overview*, 6-15; (P) *Environment*, 9-12

- testing applications, (S) *Dependable*, 8-58

Tests

- See also DECnet Test Sender/DECnet Test Receiver utility (DTS/DTR)

Tests (cont'd)

- circuit loopback test, (S) *DECnet Mgmt*, 7-6, 7-9
- controller loopback test, (S) *DECnet Mgmt*, 7-8
- LAN (local area network) loopback, (S) *DECnet Mgmt*, 7-9
- local loopback test, (S) *DECnet Mgmt*, 7-6
- local-to-remote test, (S) *DECnet Mgmt*, 7-4
- loopback, (S) *DECnet Intro*, 4-7
- node-level test, (S) *DECnet Mgmt*, 7-1
- remote loopback test, (S) *DECnet Mgmt*, 7-2
- software loopback test, (S) *DECnet Mgmt*, 7-7

Text

- analyzing in object files, (G) *DCL A-M*, DCLI-28

Text compression, (P) *Util Routines*, DCX-1

Text display

- customizing font for, (P) *Debugger*, 3-35

Text editors

- See also Editors
- creating files, (G) *User*, 4-11
- displaying files with, (G) *User*, 4-14
- modifying files, (G) *User*, 4-11

Text file formatting

- See DSR

Text files

- using text editor to create, (P) *Rec Mgmt Util*, 5-1

Text formatters, (G) *SW Overview*, 5-12

Text information and relocation (TIR) records

- Alpha object language, (P) *Linker*, B-27
- VAX object language, (P) *Linker*, A-21

Text input converter, (G) *DCL A-M*, DCLI-68

Text libraries, (P) *Environment*, 8-4

Text output converter, (G) *DCL A-M*, DCLI-69

- processing options, (G) *DCL A-M*, DCLI-71

Text processing, (P) *Environment*, 5-1

- EVE, (P) *Environment*, 5-2

Text processing routines

- See DECTPU routines

Text processors, (G) *SW Overview*, 4-4

Text retrieval facility

- See VTX

Text selection

- language sensitive, (P) *Debugger*, 3-13, 3-35

TFF (Terminal Fallback Facility)

- See Terminal Fallback Facility

T field in symbolic offset

- for specifying varying field length, (P) *RMS Ref*, 2-3

TFTP (Trivial File Transfer Protocol), (S) *TCP/IP*, 2-5

TFU (Terminal Fallback Utility)

- See Terminal Fallback Utility

THEN command

using in command procedures, (G) *User*, 15-10

THEN keyword

and IF command, (G) *DCL A-M*, DCLI-245

ThinWire Ethernet, (S) *DECnet Intro*, 1-6, 3-5

THIS_CATCH exception, (P) *DECthreads*, 4-6

Thread attributes, (P) *DECthreads*, 2-4

Thread attributes object

creating, (P) *DECthreads*, pthread-3

deleting, (P) *DECthreads*, pthread-5

Thread creation, (P) *DECthreads*, 2-1,

pthread-37, cma-61

guardsize attribute, (P) *DECthreads*,

pthread-6, pthread-11, cma-14, cma-20

inherit scheduling attribute, (P) *DECthreads*,

pthread-7, pthread-12, cma-15, cma-21

priority attribute, (P) *DECthreads*, pthread-8,

pthread-14, cma-17, cma-24

scheduling policy attribute, (P) *DECthreads*,

pthread-9, pthread-16, cma-18, cma-26

stacksize attribute, (P) *DECthreads*,

pthread-10, pthread-18, cma-19, cma-28

Thread environment blocks

See TEBs

Threading library

asynchronous, (P) *DECthreads*, 3-1

Threads, (P) *Modular Proc*, 3-16; (P) *Concepts*, 1-2, 13-48

See also Multithreaded programming, Tasking (multithread) programs

alerting, (P) *DECthreads*, 2-15

canceling, (P) *DECthreads*, 2-15, pthread-20

asynchronous cancelability, (P)

DECthreads, 2-15

general cancelability, (P) *DECthreads*, 2-15

definition, (P) *Calling Std*, 1-6

definition of, (P) *DECthreads*, 1-1

delaying execution of, (P) *DECthreads*,

pthread-39, cma-41

deleting, (P) *DECthreads*, 2-3, pthread-40, cma-63

error termination, (P) *DECthreads*,

pthread-37, cma-61, cma-64

events that cause termination, (P) *DECthreads*,

pthread-37, cma-61

initializing, (P) *DECthreads*, cma-44

nonreentrant routines (avoiding), (P)

DECthreads, 1-7

normal termination, (P) *DECthreads*,

pthread-37, pthread-42, cma-61, cma-65

obtaining current priority of, (P) *DECthreads*,

pthread-44, cma-66

obtaining current scheduling policy of, (P)

DECthreads, pthread-45, cma-67

obtaining handle of, (P) *DECthreads*, cma-68

Threads (cont'd)

obtaining identifier of, (P) *DECthreads*, pthread-65

per-thread context of, (P) *DECthreads*, pthread-49, cma-45

reentrant code necessary, (P) *DECthreads*, 1-5

releasing processor, (P) *DECthreads*, pthread-77, cma-77

scheduling, (P) *DECthreads*, 2-16

inherit scheduling attribute, (P)

DECthreads, 2-5

scheduling policy attribute, (P)

DECthreads, 2-5

scheduling priority attribute, (P)

DECthreads, 2-6

setting current priority of, (P) *DECthreads*,

pthread-70, cma-71

setting current scheduling policy and priority of,

(P) *DECthreads*, pthread-72, cma-73

starting, (P) *DECthreads*, 2-1

states, (P) *DECthreads*, 1-4

terminating, (P) *DECthreads*, 2-1, cma-60

error termination, (P) *DECthreads*, 2-2

normal termination, (P) *DECthreads*, 2-2

waiting for a mutex, (P) *DECthreads*,

pthread-59, cma-52

waiting for another to terminate, (P)

DECthreads, 2-3

waiting for the termination of, (P) *DECthreads*,

pthread-47, cma-69

waking, (P) *DECthreads*, pthread-26,

pthread-30, pthread-31, cma-29, cma-33, cma-34

yielding processor to another thread, (P)

DECthreads, pthread-77, cma-77

Threads identifier

comparing, (P) *DECthreads*, pthread-41

Threads of execution, (P) *Modular Proc*, 3-15

Threads-reentrant code

definition of, (P) *DECthreads*, 3-3

Threads-safe code

definition of, (P) *DECthreads*, 3-2

Threads-specific data, (P) *DECthreads*, 2-14

using to avoid nonreentrant software, (P)

DECthreads, 3-4

Three-dimensional graphics applications, (G) *SW Overview*, 6-16

Thresholds, customizing for events or different computer classes, (S) *DECcmds*, 5-9

Throughput (default) scheduling, (P) *DECthreads*, 2-5

Throughput rate

definition, (S) *Alpha Perform*, 1-1

Tightly coupled system kernels, (S) *Dependable*, 4-5

Time

See also Absolute time, Delta time, and TDF

Time (cont'd)

- adding interval to current time, (P)
 - DECthreads*, pthread-43, cma-75
- auditing changes to system time, (S) *Security*, 9-7
- 64-bit system format, (P) *Concepts*, 5-1
- 128-bit system format, (P) *Concepts*, 5-34
- changing system, (G) *DCL N-Z*, DCLII-229
- conversions, (P) *Concepts*, 5-2
- converting 64-bit system format to UTC, (P)
 - Sys Svc II*, SYS2-394
- converting ASCII to binary, (P) *Concepts*, 5-6
- converting binary to ASCII string, (P) *Sys Svc I*, SYS1-29
- converting binary to numeric, (P) *Sys Svc II*, SYS2-163
- converting UTC to 64-bit system format, (P)
 - Sys Svc II*, SYS2-394
- converting UTC to ASCII, (P) *Sys Svc I*, SYS1-35
- converting UTC to numeric components, (P)
 - Sys Svc II*, SYS2-165
- CPU quota for created processes, (G) *DCL N-Z*, DCLII-62
- CPU used by current process, (G) *DCL N-Z*, DCLII-333
- displaying, (G) *DCL N-Z*, DCLII-347
- extracting records by, (S) *Sys Mgmt Util A-L*, 4-5
- getting current system, (P) *Concepts*, 5-10; (P) *Sys Svc II*, SYS2-66
- internal format, (P) *Concepts*, 5-2
- modifying system time, (S) *Sys Mgr Tuning*, 20-17
- numeric and ASCII, (P) *Concepts*, 5-7
- obtaining expiration, (P) *DECthreads*, pthread-43, cma-75
- resetting after January 1st, (S) *Sys Mgr Tuning*, 20-18
- setting clusterwide, (S) *VMScluster Sys*, 5-20
- setting system, (S) *Sys Mgmt Util M-Z*, 6-16; (P) *Concepts*, 5-11; (P) *Sys Svc II*, SYS2-247
- specifying absolute and delta date and time combinations, (G) *User*, 3-13
- specifying absolute date and time, (G) *User*, 3-11
- specifying delta date and time, (G) *User*, 3-12
- synchronizing cluster time, (S) *Security*, 9-28
- updating in a VMScluster, (S) *Sys Mgr Tuning*, 20-18; (S) *Sys Mgmt Util M-Z*, 6-17
- using system services, (P) *Concepts*, 5-2 to 5-4
- VMScluster
 - displaying, (S) *Sys Mgmt Util M-Z*, 6-18
- Time conversion routine, (P) *LIB\$*, LIB-76
- F_Floating value, (P) *LIB\$*, LIB-67
- Time conversions
 - formatting, (P) *Concepts*, 5-4
- Time conversion service, (S) *Sys Mgr Essentials*, 5-33
- Time differential factor
 - See TDF
- Timed retention
 - specifying, (G) *DCL N-Z*, DCLII-22, DCLII-140, DCLII-412
- Time format
 - selecting for SHOW command, (G) *V6.2 New Feat*, 3-19
- Time formats, (S) *Sys Mgr Essentials*, 5-42
 - predefined, (S) *Sys Mgr Essentials*, 5-47
 - specifying, (S) *Sys Mgr Essentials*, 5-45
- Time manipulation
 - using LIB\$ routines, (P) *Concepts*, 5-5 to 5-7
- Time-of-day login restrictions, (S) *Security*, 3-8
- Timeout filter, (S) *DECamds*, 2-7
- Timeout periods, (G) *User*, 2-2
 - count of network, (S) *DECnet Intro*, 4-3
 - displaying, (S) *Sys Mgmt Util M-Z*, 6-58
 - for SCSI device, (P) *I/O User*, 8-8, 8-13
 - in SYSMAN, (S) *Sys Mgr Essentials*, 2-18
 - mount verification OPCOM message, (S) *Sys Mgr Essentials*, 8-60
 - setting, (S) *Sys Mgmt Util M-Z*, 6-55
- TIMEOUT_ENABLE attribute, (P) *Rec Mgmt Util*, 4-13
- TIMEOUT_PERIOD attribute, (P) *Rec Mgmt Util*, 4-13; (P) *File Appl*, 7-12
- /TIME qualifier, (P) *Alpha SDA*, SDA-49; (P) *VAX SDA*, SDA-56
- Timer and time conversion
 - system services, (P) *Environment*, 10-6, 10-14
- Timer queue entry limit, (S) *Sys Mgr Essentials*, 6-43
- Timer requests, (P) *Concepts*, 5-13
 - canceling, (P) *Concepts*, 5-16; (P) *Sys Svc I*, SYS1-80
- Timers
 - babble, (S) *DECnet Mgmt*, 3-32
 - broadcast routing, (S) *DECnet Mgmt*, 3-55
 - counter, (S) *DECnet Mgmt*, 3-21
 - dead, (S) *DECnet Mgmt*, 3-43
 - deallocating, (P) *Concepts*, 5-19
 - delay, (S) *DECnet Mgmt*, 3-43
 - for circuits, (S) *Sys Mgmt Util A-L*, 13-27
 - for multicast message in LAT environment, (S) *Sys Mgmt Util A-L*, 13-30
 - hello, (S) *DECnet Mgmt*, 3-29
 - inactivity, (S) *DECnet Mgmt*, 2-24, 3-57
 - incoming, (S) *DECnet Mgmt*, 2-24, 3-57
 - initializing, (P) *Concepts*, 5-18
 - line, (S) *DECnet Mgmt*, 3-43
 - logical link, (S) *DECnet Mgmt*, 2-24
 - obtaining statistics, (P) *Concepts*, 5-19
 - outgoing, (S) *DECnet Mgmt*, 2-24, 3-57

Timers (cont'd)

- retransmit, (S) *DECnet Mgmt*, 3-43
- routing, (S) *DECnet Mgmt*, 2-24, 3-54
- scheduling, (S) *DECnet Mgmt*, 3-43
- service, (S) *DECnet Mgmt*, 3-43
- setting, (P) *Sys Svc II*, SYS2-249
- setting in a LAT environment, (S) *Sys Mgmt Util A-L*, 13-30
- statistics
 - buffered input/output, (P) *Concepts*, 5-18
 - CPU time, (P) *Concepts*, 5-18
 - direct input/output, (P) *Concepts*, 5-18
 - elapsed time, (P) *Concepts*, 5-18
 - page faults, (P) *Concepts*, 5-18
- stream, (S) *DECnet Mgmt*, 3-43
- transmit, (S) *DECnet Mgmt*, 3-32
- Timesharing, (G) *SW Overview*, 1-4
- Timeslice
 - definition of, (P) *DECthreads*, 2-5
- Time slicing, (S) *Alpha Perform*, 6-19
 - between processes, (S) *VAX Perform*, 4-33; (S) *Alpha Perform*, 15-2
- Time-stamping
 - and verification settings, (G) *User*, 17-5
 - using SET PREFIX command, (G) *User*, 18-14
- Time-stamps
 - synchronizing in cluster, (S) *Security*, 9-28
- Time zones
 - setting up your system to compensate for, (S) *Sys Mgr Essentials*, 5-33
- time_name data type, (P) *Interfaces*, B-15
- /TIME_SLICE qualifier, (P) *Debugger*, 16-24
- TIMVCFAIL system parameter, (S) *VMScluster Sys*, A-3
- TITLE attribute, (P) *Rec Mgmt Util*, 4-37
- .TITLE directive, (P) *Concepts*, 13-60
- TLK image, (S) *DECnet Mgmt*, 4-15
- TLZ04 tape drives
 - supported by UETP, (S) *Sys Mgr Tuning*, 17-7
- /TMASK qualifier, (P) *Debugger*, 15-13
- TMD option, (P) *Rec Mgmt Util*, 4-24
- TMO option, (P) *Rec Mgmt Util*, 4-13
- TMPMBX privilege, (S) *Security*, A-18; (S) *DECnet Mgmt*, 2-31
 - for network operations, (S) *DECnet Intro*, 2-2, 3-1
- TMP option, (P) *Rec Mgmt Util*, 4-19
- TMSCP (tape mass storage control protocol), (S) *Sys Mgr Tuning*, 20-2
- TMSCP server code
 - base address, (P) *VAX SDA*, SDA-18
- TMSCP servers
 - cluster-accessible files, (S) *VMScluster Sys*, 6-1
 - cluster-accessible tapes, (S) *VMScluster Sys*, 6-15
 - controlled by TMSCP_LOAD, (G) *V6.2 New Feat*, 3-8

TMSCP servers (cont'd)

- controlled by TMSCP_SERVE_ALL, (G) *V6.2 New Feat*, 3-8
- functions, (S) *VMScluster Sys*, 6-15
- LAN tape server, (S) *VMScluster Sys*, 3-6
- SCSI tapes in a VMScluster system, (G) *V6.2 New Feat*, 3-8
- shared tapes, (S) *VMScluster Sys*, 6-1
- TUDRIVER, (S) *VMScluster Sys*, 1-4, 2-18
- TMSCP symbol, (P) *VAX SDA*, SDA-18
- TMSCP_LOAD system parameter, (G) *V6.2 New Feat*, 3-8; (S) *VMScluster Sys*, 6-15, A-3
- TMSCP_SERVE_ALL system parameter, (G) *V6.2 New Feat*, 3-8, 3-15
- TN3270, (S) *Sys Mgr Tuning*, 21-13
- Token Ring
 - Address mappings, (P) *I/O User*, 9-7
- Token ring LAN, (G) *SW Overview*, 1-11, 6-18
 - adapters, (G) *SW Overview*, 1-6, 6-25
- Tools
 - alignment, (P) *Concepts*, 22-9
 - for dependable computing, (S) *Dependable*, 5-6
 - for network monitoring, (S) *DECnet Intro*, 4-1
- TOP command, (P) *File Appl*, 10-11
- Topologies
 - of a multiple-area network, (S) *DECnet Mgmt*, 1-14
 - of a single-area network, (S) *DECnet Mgmt*, 1-14
- TOPS-10 nodes, (S) *DECnet Mgmt*, 9-14
- TOPS-20 nodes, (S) *DECnet Mgmt*, 9-17
- Total exception records, (P) *Rec Mgmt Util*, 2-17
- Total records processed, (P) *Rec Mgmt Util*, 2-17
- Total valid records, (P) *Rec Mgmt Util*, 2-17
- TP monitors
 - See Transaction-processing monitors
- TPT option, (P) *Rec Mgmt Util*, 4-13
- TPU
 - See DECTPU
- TPU\$CLEANUP routine, (P) *Util Routines*, DECTPU-28
- TPU\$CLIPARSE routine, (P) *Util Routines*, DECTPU-32
- TPU\$CLOSE_TERMINAL routine, (P) *Util Routines*, DECTPU-34
- TPU\$CONTROL routine, (P) *Util Routines*, DECTPU-35
 - regaining control from, (P) *Util Routines*, DECTPU-35, DECTPU-53
- TPU\$EDIT routine, (P) *Util Routines*, DECTPU-37
- TPU\$EXECUTE_COMMAND routine, (P) *Util Routines*, DECTPU-39
- TPU\$EXECUTE_INIFILE routine, (P) *Util Routines*, DECTPU-40

- TPU\$FILEIO routine, (P) *Util Routines*, DECTPU-42
- TPU\$HANDLER routine, (P) *Util Routines*, DECTPU-52
- TPU\$MESSAGE routine, (P) *Util Routines*, DECTPU-61
- TPU\$PARSEINFO routine, (P) *Util Routines*, DECTPU-62
- TPU\$SPECIFY_ASYNC_ACTION routine, (P) *Util Routines*, DECTPU-6, DECTPU-35, DECTPU-53, DECTPU-64
- TPU\$TPU routine, (P) *Util Routines*, DECTPU-66
- TPU\$TRIGGER_ASYNC_ACTION routine, (P) *Util Routines*, DECTPU-6, DECTPU-35, DECTPU-53, DECTPU-67
- TP_SERVER process
 - stopping permanently, (S) *Sys Mgr Tuning*, 25-20
 - stopping to dismount a disk, (S) *Sys Mgr Tuning*, 25-14
- TQELM (Timer queue entry limit)
 - job quotas in use, (S) *DECams*, 3-25
- TQELM process limit, (S) *Sys Mgr Essentials*, 6-43
 - effect of canceling timer request, (P) *Sys Svc I*, SYS1-80
- Traceback
 - compiler option, (P) *Debugger*, 9-3
 - link option, (P) *Debugger*, 5-6, 9-4
 - SHOW CALLS display, (P) *Debugger*, 6-7
- Traceback facility
 - link-time considerations, (P) *Linker*, LINK-39
- Traceback handlers, (P) *Concepts*, 13-25
- Traceback information records
 - Alpha object language, (P) *Linker*, B-45
 - VAX object language, (P) *Linker*, A-33
- /TRACEBACK qualifier, (P) *Linker*, LINK-39; (P) *Debugger*, 5-7, 9-4, 9-5
 - shareable image, (P) *Debugger*, 9-12
- Tracepoints
 - action, (P) *Debugger*, 7-9
 - activating, (P) *Debugger*, 2-5, 7-11
 - canceling, (P) *Debugger*, 7-11
 - conditional, (P) *Debugger*, 7-9
 - deactivating, (P) *Debugger*, 7-11
 - defined, (P) *Debugger*, 7-5
 - delayed triggering of, (P) *Debugger*, 7-9
 - displaying, (P) *Debugger*, 7-5
 - DO clause, (P) *Debugger*, 7-9
 - exception, (P) *Debugger*, 13-10
 - in tasking (multithread) program, (P) *Debugger*, 16-25
 - on activation (multiprocess program), (P) *Debugger*, 14-13
 - on label, (P) *Debugger*, 7-6
 - on routine, (P) *Debugger*, 7-6
 - on source line, (P) *Debugger*, 7-6
- Tracepoints (cont'd)
 - on task event, (P) *Debugger*, 16-28
 - on termination (image exit), (P) *Debugger*, 14-13
 - on vector instruction, (P) *Debugger*, 15-3
 - predefined, (P) *Debugger*, 14-13
 - saving when rerunning program, (P) *Debugger*, 2-5, 5-9
 - saving with RERUN command, (P) *Debugger*, 5-9
 - setting, (P) *Debugger*, 7-5
 - source display at, (P) *Debugger*, 10-7
 - WHEN clause, (P) *Debugger*, 7-9
- Track, (P) *File Appl*, 1-10, 3-16
 - definition, (S) *Sys Mgr Tuning*, A-2
- Traffic
 - count of user data, (S) *DECnet Intro*, 4-3
 - isolating VMScluster data, (S) *VMScluster Sys*, F-28
- Trailer labels, (P) *File Appl*, 1-20, 1-32
 - on tape files, (S) *Sys Mgr Essentials*, 8-7
- Trailer pages, (S) *Sys Mgr Essentials*, 13-33
 - file, (S) *Sys Mgr Essentials*, 13-37
 - job, (S) *Sys Mgr Essentials*, 13-37
- Training
 - environment for, (S) *Dependable*, 5-6
 - for users, importance to security, (S) *Security*, 6-5
 - lights out data center, (S) *Dependable*, 11-6
 - migration, (G) *Compatibility*, 3-8
 - personnel, (S) *Dependable*, 1-4, 3-12
 - software programmers, (S) *Dependable*, 3-10
- TRANSACTION class record
 - in Monitor utility, (S) *Sys Mgmt Util M-Z*, A-41
- Transaction group
 - example, (S) *Sys Mgr Tuning*, 25-22
- Transaction logs
 - changing the size of, (S) *Sys Mgr Tuning*, 25-9
 - checking the size of, (S) *Sys Mgr Tuning*, 25-8
 - creating, (S) *Sys Mgr Tuning*, 25-4
 - moving, (S) *Sys Mgr Tuning*, 25-11
 - planning, (S) *Sys Mgr Tuning*, 25-3
- Transaction processing
 - ACMS, (G) *SW Overview*, 7-12
 - applications, (G) *SW Overview*, 2-13, 7-10
 - client/server systems, (G) *SW Overview*, 7-11
 - distributed environments, (G) *SW Overview*, 4-12, 7-11
 - distributed management, (G) *SW Overview*, 3-6
 - environments, (S) *Dependable*, 3-9
 - global symbols, (P) *Alpha SDA*, SDA-15
 - monitor, (G) *SW Overview*, 2-13, 7-12
 - servers to desktop clients, (G) *SW Overview*, 6-22
 - software, (G) *SW Overview*, 2-13

- Transaction processing (cont'd)
 - two-phase commit protocol, (G) *SW Overview*, 7-13
 - use of DECADMIRE, (S) *Dependable*, 3-9
 - using DECdtm, (G) *SW Overview*, 7-13
- Transaction-processing monitors, (S) *Dependable*, 8-52, 8-53
- Transactions
 - aborting asynchronously, (P) *Sys Svc I*, SYS1-3
 - aborting synchronously, (P) *Sys Svc I*, SYS1-7
 - characteristics, (G) *SW Overview*, 7-10
 - default, (P) *Concepts*, 12-3; (P) *Sys Svc II*, SYS2-382
 - distributed, (G) *SW Overview*, 2-14, 3-6
 - ending asynchronously, (P) *Sys Svc I*, SYS1-247
 - ending synchronously, (P) *Sys Svc I*, SYS1-252
 - managing transaction logs, (S) *Sys Mgmt Util A-L*, 14-1
 - monitoring, (S) *Sys Mgr Tuning*, 25-6; (S) *Sys Mgmt Util M-Z*, 1-55
 - programming, (P) *Concepts*, 12-1
 - starting asynchronously, (P) *Sys Svc II*, SYS2-380
 - starting synchronously, (P) *Sys Svc II*, SYS2-384
- Transactions, number of disk, (S) *DECcmds*, 3-6
- Transaction sequence numbers
 - See TSNs
- /TRANSACTIONS qualifier, (P) *VAX SDA*, SDA-150
- transaction_id data type, (P) *Interfaces*, B-15
- Transfer address, (P) *Debugger*, 5-7, 13-7
- Transfer code
 - address, (P) *Calling Std*, 3-43
 - sequence, (P) *Calling Std*, 3-44
- Transfer from disk volumes, (P) *Rec Mgmt Util*, 4-23
- Transfer modes
 - EXCHANGE/NETWORK command, (G) *DCL A-M*, DCLI-215
- Transferring
 - files over the network, (S) *Sys Mgr Tuning*, 21-14; (S) *TCP/IP*, 5-5; (S) *DECnet Intro*, 2-5
 - files remotely, (S) *Sys Mgr Tuning*, 21-14; (S) *TCP/IP*, 5-5
 - records over the network, (S) *TCP/IP*, 5-5; (S) *DECnet Intro*, 2-9
- Transfer vectors, (P) *Linker*, 4-4 to 4-7
- Transitions
 - managing in a VMScluster, (S) *VMScluster Sys*, 2-10
- Translated images
 - performance of, (G) *Compatibility*, 4-6
- Translation
 - of character sets, (P) *LIB\$*, LIB-304
- Translation buffer, (S) *Alpha Perform*, 10-9
- Translation modes
 - card reader, (S) *Sys Mgr Essentials*, 7-18
- Translations
 - logical to physical, (P) *I/O User*, 2-14
- /TRANSLATION_ATTRIBUTES qualifier, (P) *File Appl*, 5-7, 6-14
- Transmission speed
 - setting for terminals, (S) *Sys Mgr Essentials*, 7-9, 7-10
- Transmit channel
 - selection, (S) *VMScluster Sys*, G-3
- Transmit passwords, (S) *DECnet Mgmt*, 2-29
 - in network operations, (S) *DECnet Intro*, 3-21
- Transmit timer, (S) *DECnet Mgmt*, 3-32
- Transparent network file access
 - providing with DFS, (S) *Dependable*, 7-17
- Transparent task-to-task communications, (S) *DECnet Intro*, 2-14; (S) *DECnet Mgmt*, 1-20, 8-1
- Transparent user network operations, (S) *DECnet Mgmt*, 1-17
- Transport header
 - See TR header
- Transport layers, (S) *TCP/IP*, 2-3, 2-4
- Transport protocol
 - See TR protocol
- Transports, (S) *Sys Mgr Tuning*, 23-6
 - See also NISCA transport protocol
 - LASTport, (S) *Sys Mgr Tuning*, 23-5
- TRAPB instruction, (P) *Calling Std*, 6-17
- TR/CC flag
 - setting in the CC header, (S) *VMScluster Sys*, F-23
 - setting in the TR header, (S) *VMScluster Sys*, F-25
- Tree, balanced binary, (P) *LIB\$*, LIB-263
- Tree structures
 - of indexed files, (P) *File Appl*, 10-16
 - of relative files, (P) *File Appl*, 10-14
 - of sequential files, (P) *File Appl*, 10-11
- TR header, (S) *VMScluster Sys*, F-25
- Tributaries, (S) *DECnet Mgmt*, 1-8, 2-8
 - address, (S) *DECnet Mgmt*, 2-8
 - circuit timers, (S) *DECnet Mgmt*, 3-32
 - control, (S) *DECnet Mgmt*, 3-31, 3-32
- Trigger boot
 - LANCP MOP downline load service, (G) *V6.2 New Feat*, 6-25; (S) *Sys Mgmt Util A-L*, 12-40
 - MOP downline load service, (S) *Sys Mgr Tuning*, 22-27
- TRIGGER command, (S) *DECnet Mgmt*, 4-2, 4-5
- Trigger message, (S) *DECnet Mgmt*, 4-2

TRIGGER NODE command, (S) *DECnet Mgmt Util*, 3-156
in LANCP utility, (S) *Sys Mgmt Util A-L*, 12-40

Trigger operations

bootstrap ROM, (S) *DECnet Mgmt*, 4-4
primary bootstrap, (S) *DECnet Mgmt*, 4-4
primary loader, (S) *DECnet Mgmt*, 4-2
TRIGGER command, (S) *DECnet Mgmt*, 4-5
TRIGGER VIA command, (S) *DECnet Mgmt*, 4-10; (S) *DECnet Mgmt Util*, 3-158
Trimming, (S) *VAX Perform*, 2-21

Triplet

See Security triplet

Trivial File Transfer Protocol

See TFTP

TRM\$M_TM_ESCAPE routine, (P) *Concepts*, 7-25
TRM\$M_TM_NOECHO routine, (P) *Concepts*, 7-25

TRM\$M_TM_NOTRMECHO routine, (P) *Concepts*, 7-24

TRM\$M_TM_PURGE routine, (P) *Concepts*, 7-25

TR numbers

display on Alpha systems, (S) *Sys Mgmt Util M-Z*, 6-39

Trojan horse programs, (S) *Security*, 5-14, 8-24

Troubleshooting

See also LAVC\$FAILURE_ANALYSIS.MAR program

adding or deleting a device control library module, (S) *Sys Mgr Essentials*, 13-83
analyzing port error-log entries, (S) *VMScluster Sys*, C-27
autostart queues, (S) *Sys Mgr Essentials*, 13-81
booting problems, (S) *Sys Mgr Essentials*, 4-14, 4-16, 4-17
fixing by booting with default parameter values, (S) *Sys Mgr Essentials*, 4-8
channel formation, (S) *VMScluster Sys*, F-17
CLUEXIT bugcheck, (S) *VMScluster Sys*, C-18
Data Link layer, (S) *DECnet Intro*, 4-13
device is not recognized by the system, (S) *Sys Mgr Essentials*, 7-7
disk servers, (S) *VMScluster Sys*, C-10
distributed enable messages, (S) *VMScluster Sys*, F-35
distributed trigger messages, (S) *VMScluster Sys*, F-35
error-log entries for CI and LAN ports, (S) *VMScluster Sys*, C-33
failure of computer to boot, (S) *VMScluster Sys*, C-1, C-6
failure of computer to join the cluster, (S) *VMScluster Sys*, C-1, C-13
failure of startup procedure to complete, (S) *VMScluster Sys*, C-15

Troubleshooting (cont'd)

forgotten passwords, (S) *Sys Mgr Essentials*, 4-10
general printer problems, (S) *Sys Mgr Essentials*, 13-78
hang condition, (S) *VMScluster Sys*, C-16
holding jobs, (S) *Sys Mgr Essentials*, 13-79
isolating data, (S) *VMScluster Sys*, F-28
jobs that will not execute, (S) *Sys Mgr Essentials*, 13-79
jobs with characteristic mismatch, (S) *Sys Mgr Essentials*, 13-81
LAN network components, (S) *VMScluster Sys*, D-3
LAN network failure analysis, (S) *VMScluster Sys*, D-3
logging in, (S) *Sys Mgr Essentials*, 4-8
loss of quorum, (S) *VMScluster Sys*, C-16
MOP servers, (S) *VMScluster Sys*, C-9
network problems, (S) *DECnet Intro*, 3-31, 4-10 to 4-17
network retransmission filters, (S) *VMScluster Sys*, F-33
NISCA communications, (S) *VMScluster Sys*, F-16
NISCA transport protocol, (S) *VMScluster Sys*, F-1
OPA0 error messages, (S) *VMScluster Sys*, C-41
OPCOM problems, (S) *Sys Mgr Essentials*, 2-22
pending jobs, (S) *Sys Mgr Essentials*, 13-79
port device problem, (S) *VMScluster Sys*, C-19
print jobs with stock mismatch, (S) *Sys Mgr Essentials*, 13-80
problems deleting a queue, form, or characteristic, (S) *Sys Mgr Essentials*, 13-82
queue manager, (S) *Sys Mgr Essentials*, 12-14
queue problems, (S) *Sys Mgr Essentials*, 13-77
repairing CI cables, (S) *VMScluster Sys*, C-26
retransmission errors, (S) *VMScluster Sys*, F-36
retransmission problems, (S) *VMScluster Sys*, F-18
routing problems, (S) *DECnet Intro*, 4-14
satellite booting, (S) *VMScluster Sys*, C-10
SCSI configurations, (G) *V6.2 New Feat*, 7-33
shared resource is inaccessible, (S) *VMScluster Sys*, C-17
stalled output queue, (S) *Sys Mgr Essentials*, 13-81
startup problems, (S) *Sys Mgr Essentials*, 4-14
system dump file for, (S) *Sys Mgr Tuning*, 15-11
system failure, (S) *Sys Mgr Tuning*, 15-11
system hang, (S) *Sys Mgr Tuning*, 15-16

Troubleshooting (cont'd)

- system startup problems, (S) *Sys Mgr Essentials*, 4-15
 - the network, (S) *DECnet Intro*, 2-16
 - UETP, (S) *Sys Mgr Tuning*, 17-21
 - using distributed enable filter, (S) *VMScluster Sys*, F-34
 - using distributed trigger filter, (S) *VMScluster Sys*, F-34
 - using Ethernet LAN analyzers, (S) *VMScluster Sys*, F-30
 - using LAN analyzer filters, (S) *VMScluster Sys*, F-33
 - using packet filters, (S) *VMScluster Sys*, F-33
 - verifying CI cable connections, (S) *VMScluster Sys*, C-22
 - verifying CI port, (S) *VMScluster Sys*, C-21
 - verifying virtual circuit state open, (S) *VMScluster Sys*, C-22
 - VMScluster LAN network failure analysis, (S) *VMScluster Sys*, C-16
 - VMScluster satellite booting, (S) *VMScluster Sys*, C-6
- TR protocol
- part of NISCA transport protocol, (S) *VMScluster Sys*, F-3
 - PEDRIVER implements packet delivery service, (S) *VMScluster Sys*, F-4
- True expression
- and IF command, (G) *DCL A-M*, DCLI-245
- TRUNCATE attribute, (P) *Rec Mgmt Util*, 4-3; (P) *File Appl*, 7-3
- Truncate-on-put option
- access requirement, (P) *File Appl*, 7-7
- /TRUNCATE qualifier
- in Backup utility, (S) *Sys Mgmt Util A-L*, 7-62
- Truncate service, (P) *RMS Ref*, RMS-101; (P) *File Appl*, 8-4, 8-5
- condition values, (P) *RMS Ref*, RMS-102
 - See also Completion status codes
 - control block input fields, (P) *RMS Ref*, RMS-102
 - control block output fields, (P) *RMS Ref*, RMS-102
 - effect on next-record position, (P) *File Appl*, 8-17
 - use restriction, (P) *RMS Ref*, RMS-101
- Truncate subfunction, (P) *I/O User*, 1-13
- TRUNCATE_ON_CLOSE attribute, (P) *Rec Mgmt Util*, 4-24
- TRUNCATE_ON_PUT attribute, (P) *Rec Mgmt Util*, 4-13
- Truncation errors, (P) *File Appl*, 3-9
- trunc routine, (P) *Portable Math*, DPML-59, B-14
- Trusted computing base
- See TCB

TRY/ENDTRY block

- restriction, (P) *DECthreads*, B-1
- TSM (Terminal Server Manager), (G) *SW Overview*, 7-7
- TSNs (transaction sequence numbers)
- used by DEC Rdb, (S) *Dependable*, 8-41
- TT2\$M_DISCONNECT characteristic, (S) *Sys Mgr Essentials*, 7-11
- TTDRIVER device driver
- loading, (S) *Sys Mgr Essentials*, 7-11
- TTY system parameters
- See System parameters, terminal behavior
- TTY_DECCHAR system parameter, (S) *Sys Mgr Essentials*, 7-10
- TTY_DEFCHAR2 system parameter, (S) *Sys Mgr Essentials*, 7-10, 7-11
- TT_CANCEL_CONTROL_O attribute, (P) *Rec Mgmt Util*, 4-13
- TT_PROMPT attribute, (P) *Rec Mgmt Util*, 4-13
- TT_PURGE_TYPE_AHEAD attribute, (P) *Rec Mgmt Util*, 4-14
- TT_READ_NOECHO attribute, (P) *Rec Mgmt Util*, 4-14
- TT_READ_NOFILTER attribute, (P) *Rec Mgmt Util*, 4-14
- TT_UPCASE_INPUT attribute, (P) *Rec Mgmt Util*, 4-14
- TU58 magnetic tapes
- See Disks
- TUDRIVER (tape class driver), (S) *VMScluster Sys*, 1-4, 2-18
- Tuning, (P) *File Appl*, 3-3, 10-24
- See also Performance, Performance optimization tasks
 - considering hardware capacity, (S) *Sys Mgr Tuning*, 16-6
 - deciding when to stop, (S) *VAX Perform*, 1-9
 - definition, (S) *Sys Mgr Tuning*, 16-4; (S) *VAX Perform*, 1-7; (S) *Alpha Perform*, 3-1
 - evaluating, (S) *Alpha Perform*, 3-4
 - evaluating success, (S) *Sys Mgr Tuning*, 16-6; (S) *VAX Perform*, 1-9
 - indexed files, (P) *File Appl*, 3-18
 - minimizing with AUTOGEN feedback, (S) *Sys Mgr Tuning*, 14-10
 - OpenVMS systems for network use, (S) *DECnet Intro*, 3-7
 - predicting when required, (S) *Sys Mgr Tuning*, 16-5; (S) *VAX Perform*, 1-8
 - prerequisites, (S) *Alpha Perform*, 3-2
 - relative files, (P) *File Appl*, 3-15
 - sequential files, (P) *File Appl*, 3-13, 3-14
 - suggestions, (S) *Alpha Perform*, 3-2
 - the network, (S) *DECnet Intro*, 2-16
 - when to stop, (S) *Alpha Perform*, 3-4
 - with AUTOGEN, (S) *Sys Mgr Tuning*, 14-5

Tuning system parameters
 on Alpha systems, (S) *Comparison*, 5-1 to 5-11

TURBOchannel
 device on, (S) *Sys Mgmt Util M-Z*, 5-29

TURBOchannel I/O interconnect, (G) *SW Overview*, 1-6

Turnkey accounts
 See Captive accounts

Turnkey user accounts, (G) *SW Overview*, 5-2

24x365 computing, (S) *Dependable*, 1-1

Two-phase commit protocol, (G) *SW Overview*, 3-6, 7-13

DECdtm supported on Alpha systems, (S) *Comparison*, 2-5

Type-ahead buffers, (P) *Concepts*, 7-38

TYPE attribute, (P) *Rec Mgmt Util*, 4-27, 4-28, 4-29

TYPE command, (G) *DCL N-Z*, DCLII-418 to DCLII-424; (P) *Debugger*, 10-3, 11-6
 and wildcard characters, (G) *User*, 4-14
 displaying files on remote nodes with, (G) *User*, 4-14
 displaying files with, (G) *User*, 4-14
 displaying files with in EDT, (G) *User*, 9-3
 in network operations, (S) *DECnet Intro*, 2-5
 tape, (S) *Sys Mgr Essentials*, 9-17
 using to execute remote command procedure, (S) *DECnet Intro*, 2-14

Type entry
 in argument descriptions, (P) *Interfaces*, 1-7

/TYPE qualifier, (P) *Debugger*, 8-28; (P) *Alpha SDA*, SDA-53, SDA-121; (P) *VAX SDA*, SDA-60, SDA-135

Types
 address expression, (P) *Debugger*, 8-4, 8-25
 array, (P) *Debugger*, 3-14, 3-17, 3-18, 8-16
 ASCII string, (P) *Debugger*, 8-16, 8-28
 compiler generated, (P) *Debugger*, 8-4, 8-14
 conversion, numeric, (P) *Debugger*, 8-7
 current, (P) *Debugger*, 8-25
 displaying, (P) *Debugger*, 8-26
 instruction, (P) *Debugger*, 8-19
 integer, (P) *Debugger*, 3-14, 8-15, 8-27
 override, (P) *Debugger*, 8-26
 pointer, (P) *Debugger*, 3-19, 8-18
 real, (P) *Debugger*, 8-15
 record, (P) *Debugger*, 3-17, 3-18, 8-17
 scalar, (P) *Debugger*, 8-15
 SET TYPE command, (P) *Debugger*, 8-25
 structure, (P) *Debugger*, 3-17, 3-18, 8-17
 symbolic address expression, (P) *Debugger*, 8-4
 /TYPE qualifier, (P) *Debugger*, 8-28
 vector register, (P) *Debugger*, 15-6

TYPE WHOLE command
 in EDT, (G) *User*, 9-3

TZK10 tape cartridge drives, (G) *DCL N-Z*, DCLII-171

U

U.S. Government OSI Profile (GOSIP) Test Facility, (G) *SW Overview*, 2-2

UAFALTERNATE logical name, (S) *Sys Mgr Essentials*, 4-10

UAFALTERNATE system parameter, (S) *Sys Mgr Essentials*, 4-10

UAFs (user authorization files), (G) *User*, 2-4; (S) *Security*, 3-1; (S) *DECnet Mgmt*, 8-12

See also NETPROXY.DAT

account expiration, (G) *User*, 2-17

account records, (G) *SW Overview*, 3-16
 and detached processes, (G) *DCL N-Z*, DCLII-58

auditing modifications to, (S) *Security*, 9-3

booting with alternate, (S) *Sys Mgr Essentials*, 4-10

building a common file, (S) *VMScluster Sys*, 5-11, B-2

checking quotas for software installation, (S) *Sys Mgr Essentials*, 3-7

creation of default nonprivileged DECnet account, (S) *DECnet Mgmt*, 5-3

default directory entry, (S) *Sys Mgmt Util A-L*, 5-18

default values, (S) *Sys Mgmt Util A-L*, 5-18

description of, (S) *Sys Mgr Essentials*, 6-2

displaying records in, (S) *Sys Mgmt Util A-L*, 5-46

enabling auditing through, (S) *Security*, 9-2, 9-6

general maintenance, (S) *Sys Mgr Essentials*, 6-6

getting information about, (P) *Sys Svc II*, SYS2-67

initial contents, (S) *Sys Mgr Essentials*, 6-6

initial modification, (S) *Sys Mgr Essentials*, 6-9

listing records in, (S) *Sys Mgr Essentials*, 6-23

LOCKPWD flag, (G) *User*, 2-7; (S) *Security*, 3-4

logical name defining location, (S) *Sys Mgr Essentials*, 5-8

login check, (S) *Sys Mgr Essentials*, 6-5

login class restrictions, (G) *User*, 2-11; (S) *Security*, 3-8

modifications and security audit, (S) *Security*, 3-19, 9-7

modifying, (S) *Sys Mgmt Util A-L*, 5-3; (P) *Sys Svc II*, SYS2-275
 user record, (S) *Sys Mgr Essentials*, 6-23

network proxy, (S) *Sys Mgr Essentials*, 6-35

normal protection, (S) *Security*, 7-23

password storage, (S) *Security*, 2-3

- UAFs (user authorization files) (cont'd)
 - privileges and, (S) *Security*, 8-12, A-1
 - process characteristics, (G) *SW Overview*, 5-2
 - recording privileges, (S) *Security*, 4-5
 - record of last login, (G) *User*, 19-10; (S) *Security*, 3-17
 - records
 - creating multiple default, (S) *Sys Mgr Essentials*, 6-24
 - re-creating, (S) *Sys Mgmt Util A-L*, 5-3
 - renaming records, (S) *Sys Mgmt Util A-L*, 5-43
 - resource limits for VAX and Alpha, (S) *Sys Mgr Essentials*, 6-40
 - returning to the default, (S) *Sys Mgr Essentials*, 4-11
 - synchronization with rights database, (S) *Security*, 8-5
 - SYSMAN checks, (S) *Sys Mgr Essentials*, 2-16
 - SYSUAF.DAT, (S) *Sys Mgr Essentials*, 6-2
 - use during login, (G) *SW Overview*, 3-9
 - user accounts, (G) *SW Overview*, 5-1
 - user priorities, (S) *Sys Mgr Essentials*, 6-31
 - UCBs (unit control blocks), (P) *Alpha SDA*, SDA-84; (P) *VAX SDA*, SDA-91
 - UCB symbol, (P) *VAX SDA*, SDA-18
 - /UCS_SEQUENCE=(ESCAPE_SEQUENCE)
 - qualifier
 - in Mount utility, (S) *Sys Mgmt Util M-Z*, 2-36
 - UDA50 disk adapter, (P) *I/O User*, 2-1
 - UDP (User Datagram Protocol), (S) *TCP/IP*, 2-4, 2-5
 - UETCONT00.DAT file, (S) *Sys Mgr Tuning*, 17-31
 - creation of, (S) *Sys Mgr Tuning*, 17-31
 - UETINIDEV.DAT file, (S) *Sys Mgr Tuning*, 17-31, 17-32
 - creation of, (S) *Sys Mgr Tuning*, 17-31
 - format, (S) *Sys Mgr Tuning*, 17-32
 - UETININET.DAT file, (S) *Sys Mgr Tuning*, 17-36
 - UETINIT00.EXE image, (S) *Sys Mgr Tuning*, 17-31
 - UETINIT01.EXE image, (S) *Sys Mgr Tuning*, 17-21, 17-31
 - UETLOAD00.DAT file, (S) *Sys Mgr Tuning*, 17-34
 - UETNETS00.EXE file, (S) *Sys Mgr Tuning*, 17-36
 - UETP\$NODE_ADDRESS logical name, (S) *Sys Mgr Tuning*, 17-12
 - UETP (User Environment Test Package), (S) *DECnet Mgmt*, 6-2
 - aborting execution, (S) *Sys Mgr Tuning*, 17-15
 - compact disc drives supported by, (S) *Sys Mgr Tuning*, 17-7
 - creating a command procedure to run, (S) *VMSccluster Sys*, 8-44
 - DECnet installation defaults, (S) *Sys Mgr Tuning*, 17-30
 - description, (S) *Sys Mgr Tuning*, 17-1
 - displaying tests as they run, (S) *Sys Mgr Tuning*, 17-18
 - initialization phase, (S) *Sys Mgr Tuning*, 17-31
 - interpreting output, (S) *Sys Mgr Tuning*, 17-17
 - Loopback mirror account requirement, (S) *DECnet Intro*, 3-29
 - master command procedure, (S) *Sys Mgr Tuning*, 17-30
 - MIRRO\$SERVER account, (S) *DECnet Mgmt*, 5-5
 - normal completion, (S) *Sys Mgr Tuning*, 17-15
 - optical disk drives supported by, (S) *Sys Mgr Tuning*, 17-7
 - organization, (S) *Sys Mgr Tuning*, 17-30
 - required privileges, (S) *Sys Mgr Tuning*, 17-23
 - required quotas, (S) *Sys Mgr Tuning*, 17-23
 - requirements for small disk systems, (S) *Sys Mgr Tuning*, 17-11
 - running all phases, (S) *Sys Mgr Tuning*, 17-3
 - running individual phase, (S) *Sys Mgr Tuning*, 17-13
 - running in large cluster, (S) *VMSccluster Sys*, 8-44
 - running multiple passes, (S) *Sys Mgr Tuning*, 17-14, 17-20
 - similar on VAX and Alpha systems, (S) *Comparison*, 2-5
 - specifying values for LOAD phase, (S) *VMSccluster Sys*, 8-44
 - starting, (S) *Sys Mgr Tuning*, 17-13
 - system resource requirements, (S) *Sys Mgr Tuning*, 17-2, 17-4
 - testing vector processors, (S) *Sys Mgr Tuning*, 17-12
 - TLZ04 tape drive, (S) *Sys Mgr Tuning*, 17-7
 - typical failures reported by, (S) *Sys Mgr Tuning*, 17-21
 - using to test DECnet hardware and software, (S) *DECnet Intro*, 3-29
 - VAX Vector Instruction, (S) *Sys Mgr Tuning*, 17-12
 - UETP.COM procedure, (S) *Sys Mgr Tuning*, 17-30
 - terminating, (S) *Sys Mgr Tuning*, 17-15
 - UETP.LOG file, (S) *Sys Mgr Tuning*, 17-15, 17-20, 17-29, 17-35
 - UETPHAS00.EXE program, (S) *Sys Mgr Tuning*, 17-30, 17-31
 - UETUNAS00.EXE UETP test image, (S) *Sys Mgr Tuning*, 17-19
 - UFDs (user file directories), (S) *Sys Mgr Tuning*, A-4
 - See also Directory structures
 - UFO (user-file open), (P) *Concepts*, 8-10
 - UFO option, (P) *Rec Mgmt Util*, 4-24
 - UIC-based protection, (P) *File Appl*, 4-26
 - See Protection codes
 - uic data type, (P) *Interfaces*, B-16

- UIC directory specifications, (G) *User*, 5-10
 - translating to named format, (G) *User*, 5-10
- UIC groups
 - design limitations, (S) *Security*, 8-2
- UIC identifiers
 - example, (G) *User*, 19-2; (S) *Security*, 4-4, 4-19
- UICs (user identification codes), (G) *SW Overview*, 3-15; (S) *Security*, 2-4, 4-2; (S) *Sys Mgr Essentials*, 6-14; (S) *TCP/IP*, 4-1; (P) *Interfaces*, B-15, B-16; (P) *Rec Mgmt Util*, 4-22, 4-28; (P) *File Appl*, 1-33
 - adding to rights database, (S) *Security*, 8-5
 - building common file, (S) *VMScluster Sys*, 5-11, B-2
 - C2 systems and, (S) *Security*, C-7
 - changing an object's, (S) *Security*, 4-7
 - changing defaults, (G) *DCL N-Z*, DCLII-231
 - default protection, (G) *User*, 19-5
 - changing, (S) *Sys Mgr Essentials*, 9-7
 - delimiting in control block fields, (P) *RMS Ref*, A-6
 - directory protection, (S) *Sys Mgr Essentials*, 9-11
 - disk usage kept in quota file, (S) *Sys Mgr Tuning*, A-9
 - for disk quota file, (S) *Sys Mgmt Util M-Z*, 6-21
 - for UETP, (S) *Sys Mgr Tuning*, 17-6
 - identifiers, (S) *Sys Mgr Essentials*, 11-10; (S) *Sys Mgmt Util A-L*, 1-13
 - interpreting, (S) *Sys Mgr Essentials*, 11-7
 - member number, (S) *Sys Mgr Essentials*, 6-18
 - object access evaluations and, (S) *Security*, 4-11
 - overriding for tape volumes, (S) *Sys Mgr Essentials*, 8-25
 - process, (S) *Security*, 4-3
 - protection
 - of queues, (S) *Sys Mgr Essentials*, 13-22
 - public volumes, (S) *Sys Mgr Essentials*, 8-15
 - protection mechanisms, (G) *SW Overview*, 5-1
 - single process summary, (S) *DECamsds*, 3-21
 - specifying, (S) *Sys Mgmt Util M-Z*, 2-29
 - specifying for directories, (G) *DCL A-M*, DCLI-91
 - specifying for files, (G) *DCL A-M*, DCLI-89
 - storage of, (S) *Security*, 4-3
 - uniqueness requirement for clustered systems, (S) *Security*, 11-5
 - [0,0], (S) *Sys Mgr Essentials*, 8-49
- UID (user identification), (S) *TCP/IP*, 4-1
- UID/GID (user identification/group identification) pair, (S) *TCP/IP*, 4-1
- UIF option, (P) *Rec Mgmt Util*, 4-14
- ULK option, (P) *Rec Mgmt Util*, 4-11
- ULTRIX systems, (S) *DECnet Mgmt*, 9-23; (P) *DECthreads*, A-3
 - in network operations, (S) *DECnet Intro*, 1-6
- Unaligned bit array descriptors, (P) *Calling Std*, 5-18
- Unaligned bit string descriptors, (P) *Calling Std*, 5-17
- Unaligned bit string with bounds descriptors, (P) *Calling Std*, 5-22
- Unaligned data
 - reduced performance, (G) *Compatibility*, 4-6
- Unalignment, (P) *Concepts*, 22-1
- Unary operators, (P) *Alpha SDA*, SDA-12 to SDA-13; (P) *VAX SDA*, SDA-16
- Unattended systems
 - memory dump, (S) *DECnet Mgmt*, 4-11
 - slave, (S) *DECnet Mgmt*, 4-11
- UNDEFINED format, (P) *Rec Mgmt Util*, 4-33
- /UNDEFINED_FAT qualifier
 - in Mount utility, (S) *Sys Mgmt Util M-Z*, 2-37
- Underflow detection, (P) *MTH\$*, 2-8
- UNIBUS I/O addresses, (S) *Sys Mgmt Util M-Z*, 5-30
- Uniform resource locators
 - See URLs
- Uninterruptible power systems
 - See UPS
- Uniprocessing, (G) *SW Overview*, 1-4
- Uniprocessing synchronization images, (S) *Comparison*, 2-18
- Uniprocessor operations, (P) *Concepts*, 14-5
- Unit control blocks
 - See UCBs
- Unit errors
 - recovery from, (S) *Dependable*, 8-22t
- Unit number field, (G) *User*, 12-10
 - default value, (G) *User*, 12-9
- Unit testing, (P) *Modular Proc*, 4-1
 - black box, (P) *Modular Proc*, 4-2
 - white box, (P) *Modular Proc*, 4-3
- UNIVERSAL= option, (P) *Linker*, LINK-67
 - comparison to transfer vectors, (P) *Linker*, 4-4
 - declaring universal symbols, (P) *Linker*, 4-2
 - specifying, (P) *Linker*, 4-8
- Universal alias names
 - specifying, (P) *Linker*, 4-11, LINK-65
- Universal symbols, (P) *Debugger*, 9-3, 9-5, 9-11, 9-15
 - declaring alias names for, (P) *Linker*, 4-11
 - declaring on Alpha systems, (P) *Linker*, 4-8
 - declaring on VAX systems, (P) *Linker*, 4-2, LINK-67
 - definition, (P) *Linker*, 2-1
 - for symbols that represent data, (P) *Linker*, 4-5

- Universal symbols (cont'd)
 - for symbols that represent procedures, (P) *Linker*, 4-4
 - object module definition format, (P) *Linker*, B-20
- UNIX systems, (S) *TCP/IP*, 1-4, 1-5, 1-6
 - files, (S) *TCP/IP*, 5-6
 - identification codes, (S) *TCP/IP*, 4-1
 - UID/GID pair, (S) *TCP/IP*, 4-1
- Unknown opcode errors, (S) *VMScluster Sys*, C-37
- Unload function
 - disk, (P) *I/O User*, 2-35
 - magnetic tape, (P) *I/O User*, 3-18
- Unloading devices
 - with DISMOUNT command, (G) *DCL A-M*, DCLI-180
- Unloading licenses, (S) *Sys Mgmt Util M-Z*, 6-43
- /UNLOAD qualifier
 - in Mount utility, (S) *Sys Mgmt Util M-Z*, 2-38
- UNLOCK command
 - not supported on Alpha systems, (S) *Comparison*, B-2
- unordered routine, (P) *Portable Math*, DPML-60, B-14
- Unsegmented key, (P) *Rec Mgmt Util*, 4-27
- Unused bits in passed data, (P) *Calling Std*, 3-50
- Unwind condition handlers, (P) *Concepts*, 13-67
- Unwinds
 - completion, (P) *Calling Std*, 6-21, 6-23
 - exit, (P) *Calling Std*, 6-21
 - GOTO, (P) *Calling Std*, 6-21
 - handler invocation, (P) *Calling Std*, 6-22
 - nested, (P) *Calling Std*, 6-25
 - operations, (P) *Calling Std*, 6-19
 - multiple active, (P) *Calling Std*, 6-25
 - overlapping, (P) *Calling Std*, 6-25
- UNXSIGNAL bugcheck, (P) *Alpha SDA*, SDA-19
- UP command, (P) *File Appl*, 10-11
- UPDATE attribute, (P) *Rec Mgmt Util*, 4-3, 4-36; (P) *File Appl*, 7-3, 7-4
- UPDATE DEVICE command
 - in LANCP utility, (S) *Sys Mgmt Util A-L*, 12-41
- Update-if option, (P) *File Appl*, 8-3 to 8-4
- Update operation, (P) *File Appl*, 3-13
- Update procedures
 - definition, (S) *Sys Mgr Essentials*, 3-5
 - restrictions, (S) *Sys Mgr Essentials*, 3-5
- Update service, (P) *RMS Ref*, RMS-104; (P) *File Appl*, 8-1, 8-4
 - comparing with Put service for stream format files, (P) *RMS Ref*, RMS-105
 - condition values, (P) *RMS Ref*, RMS-106
 - control block input fields, (P) *RMS Ref*, RMS-105
 - control block output fields, (P) *RMS Ref*, RMS-106
- Update service (cont'd)
 - high-level language equivalents, (P) *File Appl*, 8-1
 - invoking, (P) *RMS Ref*, 4-11
 - program example, (P) *RMS Ref*, A-31
 - requirements for using, (P) *RMS Ref*, RMS-105
 - run-time options, (P) *File Appl*, 9-17 to 9-18
 - using with indexed files, (P) *RMS Ref*, RMS-105
- UPDATE_IF attribute, (P) *Rec Mgmt Util*, 4-14; (P) *File Appl*, 8-7
- UPD option, (P) *Rec Mgmt Util*, 4-3, 4-36
- Upgraded systems, (S) *VMScluster Sys*, 4-1
- UPGRADE privilege, (S) *Security*, A-18
- Upgrade procedures
 - and system version dependent applications, (S) *Sys Mgr Essentials*, 5-23
 - definition, (S) *Sys Mgr Essentials*, 3-5
 - on Alpha systems, (S) *Sys Mgr Essentials*, 3-2
 - POLYCENTER Software Installation utility, (S) *Sys Mgr Essentials*, 3-2, 3-29
 - restrictions, (S) *Sys Mgr Essentials*, 3-5
 - steps in, (S) *Sys Mgr Essentials*, 3-5
 - using with existing OpenVMS, (S) *Sys Mgr Essentials*, 3-2
- Upgrades
 - for multiple-system disk VAXclusters, (S) *VMScluster Sys*, 10-3
 - rolling, (S) *VMScluster Sys*, 10-3
- UPI option, (P) *Rec Mgmt Util*, 4-36
- Upline dumping, (G) *Compatibility*, 2-6; (S) *Comparison*, 6-2
- Upline memory dumps, (S) *DECnet Intro*, 2-16; (S) *DECnet Mgmt*, 4-11
 - over LAN, (S) *DECnet Mgmt*, 4-13
 - requirements, (S) *DECnet Mgmt*, 4-13
- UPS (uninterruptible power systems)
 - VAXft built-in use of, (S) *Dependable*, 5-2
- Upward compatibility, (P) *Modular Proc*, 6-1, A-5
- URLs (uniform resource locators), (S) *TCP/IP*, 3-5
- Usage count
 - DIRECTORY/SIZE command, (S) *Sys Mgr Essentials*, 8-49
 - DISKQUOTA display, (S) *Sys Mgr Essentials*, 8-49
 - updating, (S) *Sys Mgmt Util M-Z*, 6-26
- /USAGE qualifier, (S) *Sys Mgmt Util A-L*, 3-5, 3-11
 - in Analyze/Disk_Structure utility, (S) *Sys Mgmt Util A-L*, 3-11
- Use access, (S) *Security*, 5-1
- USE command
 - in conversational boot, (S) *Sys Mgr Essentials*, 4-7
 - in SYSGEN, (S) *Sys Mgr Tuning*, 14-31, 14-33; (S) *Sys Mgmt Util M-Z*, 5-32

- UseNet (User's Network) protocol, (S) *TCP/IP*, 3-6
- User (security category)
 - controlling types of access, (S) *Sys Mgmt Util A-L*, 1-13
- User accounts, (S) *Security*, 6-6
 - altering, (S) *Sys Mgmt Util A-L*, 5-36
 - changing quotas or privileges, (S) *Sys Mgr Essentials*, 6-23
 - comparing, (S) *VMScluster Sys*, B-1
 - coordinating, (S) *VMScluster Sys*, B-2
 - creating, (S) *Sys Mgmt Util A-L*, 5-8
 - Data Analyzer node privileges and quotas, (S) *DECcmds*, A-14
 - deleting, (S) *Sys Mgr Essentials*, 6-25; (S) *Sys Mgmt Util A-L*, 5-41
 - disabling, (S) *Sys Mgr Essentials*, 6-27
 - group UIC, (S) *VMScluster Sys*, B-2
 - listing records of, (S) *Sys Mgr Essentials*, 6-23
 - maintaining, (S) *Sys Mgr Essentials*, 6-24
 - modifying, (S) *Sys Mgr Essentials*, 6-23
 - restricting use, (S) *Sys Mgr Essentials*, 6-27
 - security considerations, (S) *Security*, 7-4
 - setting up, (S) *Sys Mgr Essentials*, 6-6
- User-action routines, (P) *Modular Proc*, 2-6
 - optional, (P) *Modular Proc*, 3-7
 - passing, (P) *Modular Proc*, 3-7
- User authorization, (S) *Sys Mgr Essentials*, 6-5
 - account expiration, (S) *Security*, 3-13
 - login class restrictions, (S) *Security*, 3-8
 - privilege use, (S) *Security*, 4-5
 - shift restrictions, (S) *Security*, 3-8
- User authorization files
 - See UAFs and SYSUAF.DAT files
- User buffers
 - address, (P) *File Appl*, 9-15
 - size, (P) *File Appl*, 9-16
- User classes
 - list of symbolic offsets, (P) *RMS Ref*, 13-5
- User classification, (P) *Rec Mgmt Util*, 4-23
- User Datagram Protocol
 - See UDP
- User-defined condition values
 - signaling, (P) *Concepts*, 13-61
- User-defined logical name tables, (P) *Concepts*, 10-6
- User-defined objects, (S) *DECnet Mgmt*, 2-25
- User-defined patterns
 - ability of LAN protocol analyzer to detect, (S) *VMScluster Sys*, F-27
- User disks
 - preparing for UETP, (S) *Sys Mgr Tuning*, 17-2, 17-6
 - space requirements for UETP, (S) *Sys Mgr Tuning*, 17-5
 - test error during UETP, (S) *Sys Mgr Tuning*, 17-24
- User disks (cont'd)
 - testing with UETP, (S) *Sys Mgr Tuning*, 17-33
 - UETP test image, (S) *Sys Mgr Tuning*, 17-34
- User-entered reply
 - as used in example for selecting key path, (P) *RMS Ref*, A-23
- User environment
 - computer-specific functions, (S) *VMScluster Sys*, 5-8
 - creating a common-environment cluster, (S) *VMScluster Sys*, 5-8
 - OpenVMS Alpha, (G) *Compatibility*, 1-2
 - OpenVMS VAX, (G) *Compatibility*, 1-2
- User Environment Test Package
 - See UETP
- User file directories
 - See UFDs
- User identification
 - See UID
- User identification codes
 - See UICs
- User interfaces, (G) *SW Overview*, 1-3
 - accessing different environments, (G) *SW Overview*, 5-2
 - graphical, (G) *SW Overview*, 5-2, 5-4
 - portable, (G) *SW Overview*, 2-4
 - programming tools, (G) *SW Overview*, 4-17
 - responding to forms, (G) *SW Overview*, 5-8
 - standards, (G) *SW Overview*, A-2
 - system access, (G) *SW Overview*, 5-1
- User irresponsibility
 - training as antidote, (S) *Security*, 6-5
- User libraries
 - See Help libraries
- User library files
 - limiting scope of linker processing, (P) *Linker*, LINK-40
 - linker's search of, (P) *Linker*, LINK-41
 - specifying, (P) *Linker*, 2-13, LINK-40
 - /USERLIBRARY qualifier, (P) *Linker*, LINK-40
- User loads
 - defined for UETP DECnet test, (S) *Sys Mgr Tuning*, 17-36
 - defining for the UETP load test, (S) *Sys Mgr Tuning*, 17-14
 - equation used to determine for UETP load test, (S) *Sys Mgr Tuning*, 17-18, 17-19
- User Mail profile, (S) *Sys Mgr Essentials*, 6-38
- User mode, (S) *Alpha Perform*, 9-7
 - logical names, (S) *Sys Mgr Tuning*, 16-15
- User-mode (PSL\$C_USER) constant
 - for FAB\$V_CHAN_MODE, (P) *RMS Ref*, 4-6
- User-mode images
 - slicing, (G) *Compatibility*, 4-11
- User names

User names (cont'd)

- as identifiers, (S) *Security*, 2-3, 4-3; (S) *Sys Mgr Essentials*, 11-10; (S) *Sys Mgmt Util A-L*, 1-13
- entering when logging in, (S) *Sys Mgr Essentials*, 2-10
- identifiers added with, (S) *Sys Mgmt Util A-L*, 5-19
- specifying at login, (G) *DCL A-M*, DCLII-410
- specifying with wildcards, (S) *Sys Mgmt Util A-L*, 5-6
- /USERNAME value, (S) *TCP/IP*, 5-2
- User number, (P) *Rec Mgmt Util*, 4-22
- User-open routines, (P) *Concepts*, 8-15
- User passwords
 - See Passwords
- User portability, (G) *SW Overview*, 2-5
- User privileges, (P) *Interfaces*, 4-2
- User procedures, (P) *Interfaces*, 3-1
- User profiles
 - creating, (P) *Sys Svc I*, SYS1-116
- User programs
 - working set limits, (S) *Alpha Perform*, 6-3
- User prompt strings
 - program example, (P) *RMS Ref*, A-27
- /USER qualifier, (P) *Alpha SDA*, SDA-151; (P) *VAX SDA*, SDA-177
- User requests
 - responding to, (G) *DCL N-Z*, DCLII-42
- User resources, (S) *Sys Mgr Essentials*, 6-39
- User rights database file
 - See RIGHTSLIST.DAT
- Users
 - access through ACEs, (S) *Security*, 4-17
 - analyzing dependability needs of, (S) *Dependable*, 2-1
 - C2 systems and, (S) *Security*, C-7
 - capturing user requests in queues, (S) *Dependable*, 8-57
 - displaying disk quota of, (G) *DCL N-Z*, DCLII-331
 - displaying interactive terminal name of, (G) *DCL N-Z*, DCLII-350
 - displaying names on system, (G) *DCL N-Z*, DCLII-350
 - displaying process identification code (PID) of, (G) *DCL N-Z*, DCLII-350
 - displaying process rights identifiers, (G) *User*, 19-2; (S) *Security*, 4-4
 - displaying rights, (S) *Security*, 8-6
 - file security and, (S) *Security*, 5-13
 - granting privileges, (S) *Security*, 8-12
 - interface to network, (S) *DECnet Mgmt*, 1-17
 - interfacing through forms, (S) *Dependable*, 8-50
 - introduction to system, (S) *Security*, 6-5

Users (cont'd)

- limiting the number of interactive, (S) *Sys Mgr Essentials*, 5-16; (S) *Sys Mgr Tuning*, 16-4
- network operations, (S) *DECnet Mgmt*, 8-1
- protection code categories, (S) *Security*, 4-24; (S) *Sys Mgr Essentials*, 11-8
- recording name on disk volume, (G) *DCL N-Z*, DCLII-237
- requesting access, (S) *Security*, 4-12
- restricting login hours for, (S) *Sys Mgr Tuning*, 16-4
- security categories of, (S) *Security*, 4-8, 4-24 to 4-25; (S) *Sys Mgr Essentials*, 11-8
- security profiles of, (S) *Security*, 4-1
- sending messages to with OPCOM, (S) *Sys Mgr Essentials*, 2-22
- sending requests to an operator, (S) *Sys Mgr Essentials*, 2-25
- setting default object protection, (S) *Security*, 8-15
- training, (S) *Security*, 6-5
- transparent network operations, (S) *DECnet Mgmt*, 1-17
- trusted, (S) *Security*, C-5, C-8
- untrusted, (S) *Security*, C-5
- validation of, (S) *Sys Mgr Essentials*, 2-16
- User-specified job retention
 - changing, (S) *Sys Mgr Essentials*, 13-74
 - PRINT/RETAIN command, (G) *DCL N-Z*, DCLII-20
 - SET ENTRY/RETAIN command, (G) *DCL N-Z*, DCLII-139
 - SUBMIT/RETAIN command, (G) *DCL N-Z*, DCLII-410
- User stacks
 - displaying contents, (P) *Alpha SDA*, SDA-151; (P) *VAX SDA*, SDA-177
 - pointer, (P) *Alpha SDA*, SDA-15; (P) *VAX SDA*, SDA-19
- User training, (S) *Security*, 6-5
- User-written device drivers
 - on OpenVMS Alpha systems, (G) *Compatibility*, 4-9
- User-written system services, (S) *Security*, C-3
 - implemented as privileged shareable images, (P) *Linker*, 4-11
 - replacing with protected subsystems, (S) *Security*, 13-1
- user_arg data type, (P) *Interfaces*, B-16
- USER_FILE_OPEN attribute, (P) *Rec Mgmt Util*, 4-24; (P) *File Appl*, 7-4
- USER_INTERLOCK attribute, (P) *Rec Mgmt Util*, 4-36; (P) *File Appl*, 7-4, 7-6
- USER_MSGS boot flag, (S) *Comparison*, 2-11
- USP symbol, (P) *Alpha SDA*, SDA-15; (P) *VAX SDA*, SDA-19

UTC\$CONFIGURE_TDF.COM command
 procedure
 sample session, (S) *Sys Mgr Essentials*, 5-39
 showing and setting your time differential
 factor (TDF), (S) *Sys Mgr Essentials*, 5-35
 UTC (Coordinated Universal Time), (S) *Sys Mgr
 Essentials*, 5-33 to 5-34
 converting format to ASCII, (P) *Sys Svc I*,
 SYS1-35
 getting format, (P) *Sys Svc II*, SYS2-79
 UTC system services, (P) *Concepts*, 5-34
 Utilities
 OpenVMS, (G) *SW Overview*, 3-1, 3-4
 POSIX, (G) *SW Overview*, 4-14
 Utility routines, (P) *Environment*, 10-15; (P) *Util
 Routines*, SMB-1
 See also ACL editor routines, CLI routines,
 DCX routines, DECTPU routines, EDT
 routines, FDL routines, PSM routines, SMB
 routines, and SOR routines
 definition, (P) *Util Routines*, 1-1

V

VACK datagram, (S) *VMScluster Sys*, F-24
 VALIDATE QUEUE command, (P) *Alpha SDA*,
 SDA-160; (P) *VAX SDA*, SDA-185
 Validation of users, (S) *Sys Mgr Essentials*, 2-16
 Validity rules, (P) *Rec Mgmt Util*, 6-1
 /VALUE qualifier, (P) *Debugger*, 12-6
 Values
 in DCL command lines, (G) *User*, 3-3, 3-4
 Value test in expression, (G) *DCL A-M*, DCLI-245
 Variable buffer descriptors, (P) *Calling Std*, 5-23
 VARIABLE format, (P) *Rec Mgmt Util*, 4-34
 Variable format units
 See VFUs
 Variable-length bit field routine, (P) *Concepts*,
 6-10
 Variable-length records, (P) *Rec Mgmt Util*, 4-34;
 (P) *File Appl*, 1-30
 guidelines for specifying, (P) *RMS Ref*, 4-22
 with D format, (P) *File Appl*, 2-10
 with V (LSB) format, (P) *File Appl*, 2-9
 with V (MSB) format, (P) *File Appl*, 2-9
 Variable names
 address expression, (P) *Debugger*, 8-7
 DEPOSIT command, (P) *Debugger*, 8-3
 EXAMINE command, (P) *Debugger*, 8-2
 language expression, (P) *Debugger*, 8-6
 SET WATCH command, (P) *Debugger*, 7-11
 Variables
 as override type, (P) *Debugger*, 8-28
 assigning in command procedures, (G) *User*,
 15-9
 assigning using INQUIRE command, (G) *User*,
 15-9

Variables (cont'd)

automatic, (P) *Debugger*, 3-19, 3-21, 8-1
 changing value of, (P) *Debugger*, 3-20, 8-3,
 8-14
 definition, (G) *User*, 15-7
 depositing into, (P) *Debugger*, 3-20, 8-3, 8-14
 determining in command procedures, (G) *User*,
 15-8
 displaying value of, (P) *Debugger*, 3-14, 8-2,
 8-14
 examining, (P) *Debugger*, 3-14, 8-2, 8-14
 global section, (P) *Debugger*, 14-16
 monitoring, (P) *Debugger*, 3-17
 nonstatic, (P) *Debugger*, 3-21, 7-14, 8-1
 optimized code, (P) *Debugger*, 3-21, 13-1
 register, (P) *Debugger*, 3-21, 7-14, 8-1
 selecting name from window, (P) *Debugger*,
 3-13
 shared by threads, (P) *DECthreads*, 3-5
 stack local, (P) *Debugger*, 3-21, 7-14, 8-1
 static, (P) *Debugger*, 3-21, 7-14
 uninitialized, (P) *Debugger*, 3-21, 8-1
 watchpoint, (P) *Debugger*, 3-19, 7-11, 14-16
 Variable-size stack frames, (P) *Interfaces*, 2-6;
 (P) *Calling Std*, 3-10
 Variable with fixed-length control field
 See VFC records
 Varying character string data types, (P) *Calling
 Std*, 4-7
 Varying length strings, (P) *STR\$*, 2-1, 2-2, 2-3,
 STR-9, STR-23, STR-64
 Varying string
 returned to stack, (P) *Calling Std*, 2-8
 Varying string array descriptors, (P) *Calling Std*,
 5-15
 Varying string descriptors, (P) *Calling Std*, 5-13
 varying_arg data type, (P) *Interfaces*, B-16
 VAX ACMS
 See ACMS
 VAX Ada
 See Ada
 VAX APL
 See APL
 VAX Application Control and Management System
 See ACMS
 VAX BASIC
 See BASIC
 VAX BLISS
 See BLISS
 VAX BLISS-32
 See BLISS-32
 VAX C
 See C
 VAXcluster environments
 See also VMScluster systems
 availability, (G) *SW Overview*, 2-12

VAXcluster environments (cont'd)

- base address of loadable code, (P) *VAX SDA*, SDA-17
 - building single security domain, (S) *Security*, 11-2
 - Business Recovery Server, (G) *SW Overview*, 7-10
 - C2 system restrictions, (S) *Security*, C-9
 - client/server, (G) *SW Overview*, 2-8
 - computer interconnect, (S) *Dependable*, 6-15
 - configurations, (G) *SW Overview*, 1-4, 1-7
 - defining the number of nodes for AUTOGEN, (S) *Sys Mgr Tuning*, 14-21
 - Digital Storage Systems Interconnect (DSSI), (S) *Dependable*, 6-13
 - disaster tolerant, (G) *SW Overview*, 1-8, 2-12
 - displaying SDA information, (P) *VAX SDA*, SDA-86
 - Ethernet interconnect, (S) *Dependable*, 6-11
 - LAN adapter support, (S) *Dependable*, 7-4
 - managing audit log file, (S) *Security*, 11-5
 - multiadapter support, (S) *Dependable*, 7-4
 - protected object databases, (S) *Security*, 11-6
 - protected objects, (S) *Security*, 11-6
 - security considerations, (S) *Security*, 11-1
 - security implementation, (S) *Security*, 11-7
 - summary display, (P) *VAX SDA*, SDA-86
 - synchronizing authorization data, (S) *Security*, 11-4
 - system file recommendations, (S) *Security*, 11-3
 - system file requirements, (S) *Security*, 11-2
 - use of CI data link, (S) *DECnet Mgmt*, 1-10
 - with fault tolerant system kernels, (S) *Dependable*, 6-9
- VAXCLUSTER system parameter, (S) *VMScluster Sys*, A-3
- caution when setting to 0, (S) *VMScluster Sys*, 8-22, A-4
- VAXcluster systems
- adjusting quorum after shutting down a node, (S) *Sys Mgr Essentials*, 4-29
 - providing high data availability, (S) *Dependable*, 8-20f
 - shutting down an entire VAXcluster, (S) *Sys Mgr Essentials*, 4-29
- VAX COBOL
- See COBOL
- VAX Data Distributor
- See Data Distributor
- VAX DATATRIEVE
- See DATATRIEVE
- VAX data types
- See Data types
- VAX DEC/Code Management System
- See CMS

VAX DEC/Module Management System

- See MMS
- VAX dependency checklist, (G) *Compatibility*, 4-2
- VAX Distributed File Service
- See DFS
- VAX Distributed Name Service
- See DNS
- VAX DOCUMENT
- See DOCUMENT
- VAXELN toolkit, (G) *SW Overview*, 4-18
- VAX Environment Software Translator
- See VEST
- VAX FMS
- See FMS
- VAX FORTRAN
- See also Fortran
 - /BLAS qualifier, (P) *MTH\$*, 2-2
- VAX FORTRAN-HPO compiler, (P) *MTH\$*, 2-2, 2-9
- VAXft
- fault tolerant systems, (S) *Dependable*, 6-8
 - meeting requirements for fault tolerance, (S) *Dependable*, 1-2
 - providing multiple WAN connections for, (S) *Dependable*, 7-15
 - use of built-in uninterruptible power systems, (S) *Dependable*, 5-2
- VAXft computers, (G) *SW Overview*, 1-14, 2-12
- VAX GKS
- See GKS
- VAX installation, (S) *DECams*, A-6 to A-15
- VAX instructions
- reduced performance, (G) *Compatibility*, 4-6
- VAX instruction set
- accessing through run-time library, (P) *Concepts*, 6-9
- VAX KDC
- See KDC
- VAX language extension, (P) *Calling Std*, 2-5
- VAX language implementation tables
- See Implementation tables
- VAX MACRO
- See MACRO
 - LIB\$ESTABLISH, (G) *Compatibility*, 4-4
 - recompiling on OpenVMS Alpha systems, (G) *Compatibility*, 4-5
- VAX object language, (P) *Linker*, A-1
- control commands, (P) *Linker*, A-30
 - debugger information record format, (P) *Linker*, A-33
 - operator commands, (P) *Linker*, A-28
 - stack commands, (P) *Linker*, A-23
 - store commands, (P) *Linker*, A-25
 - traceback information record format, (P) *Linker*, A-33

- VAX OPS5
 - See OPS5 programming technology
- VAX P.S.I.
 - See P.S.I.
- VAX Pascal
 - See Pascal
- VAX PL/I
 - See PL/I
- VAXport drivers, (G) *SW Overview*, 3–18
- VAX RALLY
 - See RALLY
- VAX Remote System Manager
 - See VAXrsm
- VAX RPG II
 - See RPG II
- VAXrsm
 - use in wide area networks, (S) *Dependable*, 3–6
- VAX SCAN
 - See SCAN
- VAXsimPLUS, (G) *SW Overview*, 7–7, 7–10
 - minimizing failures, (S) *Dependable*, 9–12
 - use at CSC lights out data center, (S) *Dependable*, 11–18
- VAXstation
 - See Workstations
- VAX Storage Library System
 - See SLS
- VAX systems
 - differences in system management from Alpha systems, (S) *Comparison*, 1–2, 1–3
 - downline loading, (S) *Sys Mgr Tuning*, 23–2
- VAX unit of performance
 - See VUP
- VAX Vector Instruction Emulation facility (VVIEF), (S) *Sys Mgr Tuning*, 17–12
 - definition, (S) *Sys Mgr Tuning*, 26–5
 - determining presence of, (S) *Sys Mgr Tuning*, 26–9, 26–10
 - loading, (S) *Sys Mgr Tuning*, 26–10
 - SHOW PROCESS/FULL command, (P) *Debugger*, 15–2
 - unloading, (S) *Sys Mgr Tuning*, 26–10
- VAXVMSSYS.OLD file, (S) *Sys Mgmt Util A-L*, 6–7
- VAXVMSSYS.PAR file, (S) *Sys Mgr Essentials*, 4–2; (S) *Sys Mgr Tuning*, 14–3; (S) *Sys Mgmt Util A-L*, 6–7
 - created by CLUSTER_CONFIG.COM, (S) *VMScluster Sys*, 8–1
 - initializing parameters at boot time, (S) *Sys Mgr Tuning*, 14–36
- VBNS (virtual block numbers), (P) *Rec Mgmt Util*, 1–3
- VBS class record
 - in Monitor utility, (S) *Sys Mgmt Util M-Z*, A–44
- VBSs (virtual balance slots)
 - data reduction, (S) *VAX Perform*, 2–18
 - direct I/O map, (S) *VAX Perform*, 2–18
 - disabling, (S) *VAX Perform*, 2–18
 - enabling, (S) *VAX Perform*, 2–18
- VCBs (volume control blocks), (P) *Alpha SDA*, SDA–95; (P) *VAX SDA*, SDA–106
- VCB symbol, (P) *VAX SDA*, SDA–19
- VCC_FLAGS system parameter, (S) *Sys Mgmt Util M-Z*, C–49; (S) *Comparison*, 5–17; (S) *Alpha Perform*, 18–3
- VCC_FLAGS_D system parameter, (S) *Sys Mgmt Util M-Z*, C–49
- VCC_FLAGS_S system parameter, (S) *Sys Mgmt Util M-Z*, C–49
- VCC_MAXSIZE system parameter, (S) *Sys Mgmt Util M-Z*, C–49; (S) *Comparison*, 5–17; (S) *Alpha Perform*, 18–3
- VCC_MINSIZE system parameter, (S) *Sys Mgmt Util M-Z*, C–49
- VCC_PTES system parameter, (G) *V6.2 New Feat*, 3–15; (S) *Sys Mgmt Util M-Z*, C–49
- /VC qualifier, (P) *Alpha SDA*, SDA–124; (P) *VAX SDA*, SDA–141
- VCRs (vector count registers), (S) *Sys Mgr Tuning*, 26–4; (P) *Debugger*, 15–4, B–4
- VCS (VMScluster Console System), (G) *SW Overview*, 2–14, 7–6, 7–10
 - detecting operational failures, (S) *Dependable*, 9–11
 - introduction, (S) *Dependable*, 7–18
 - use at CSC lights out data center, (S) *Dependable*, 11–18
- VCS for OpenVMS AXP (VMScluster Console System), (S) *VMScluster Sys*, 1–8
- Vector capability
 - determining availability within a system, (S) *Sys Mgr Tuning*, 26–9
 - placing an ACL on, (S) *Sys Mgr Tuning*, 26–8
- Vector-capable, (S) *Sys Mgr Tuning*, 26–4
- VECTOR class record
 - in Monitor utility, (S) *Sys Mgmt Util M-Z*, A–45
- Vector consumer
 - determining the identity of, (S) *Sys Mgr Tuning*, 26–9
 - managing, (S) *Sys Mgr Tuning*, 26–6
 - marginal, (S) *Sys Mgr Tuning*, 26–8
 - obtaining information about, (S) *Sys Mgr Tuning*, 26–8
- Vector context switch
 - obtaining information about, (S) *Sys Mgr Tuning*, 26–9
- Vector count registers
 - See VCRs

- Vector CPU time
 - obtaining information regarding process, (S) *Sys Mgr Tuning*, 26-9
 - obtaining information regarding processor, (S) *Sys Mgmt Util M-Z*, A-45
 - obtaining information regarding system, (S) *Sys Mgmt Util M-Z*, A-45
- Vector exceptions
 - delivery of, (P) *Debugger*, 15-19, 15-22
- Vector instructions, (P) *Debugger*, 15-8
 - CANCEL BREAK/VECTOR_INSTRUCTION command, (P) *Debugger*, 15-3
 - CANCEL TRACE/VECTOR_INSTRUCTION command, (P) *Debugger*, 15-3
 - delivery of vector exception, (P) *Debugger*, 15-19, 15-22
 - depositing, (P) *Debugger*, 15-12
 - displaying, (P) *Debugger*, 15-8
 - EXAMINE/OPERANDS command, (P) *Debugger*, 15-9
 - examining, (P) *Debugger*, 15-9
 - masked operation, (P) *Debugger*, 15-9, 15-14
 - operand, (P) *Debugger*, 15-9
 - replacing, (P) *Debugger*, 15-12
 - SET BREAK/VECTOR_INSTRUCTION command, (P) *Debugger*, 15-3
 - SET STEP VECTOR_INSTRUCTION command, (P) *Debugger*, 15-3
 - SET TRACE/VECTOR_INSTRUCTION command, (P) *Debugger*, 15-3
 - STEP/VECTOR_INSTRUCTION command, (P) *Debugger*, 15-3
- Vectorization of a loop
 - preventing, (P) *MTH\$, MTH-190, MTH-194, MTH-198, MTH-202*
- Vectorized programs
 - CALL/[NO]SAVE_VECTOR_STATE command, (P) *Debugger*, 15-22
 - controlling and monitoring execution, (P) *Debugger*, 15-2
 - debugging, (P) *Debugger*, 15-1
 - delivery of vector exception, (P) *Debugger*, 15-19, 15-22
 - depositing into vector register, (P) *Debugger*, 15-4, 15-6
 - depositing vector instruction, (P) *Debugger*, 15-12
 - EXAMINE/FMASK command, (P) *Debugger*, 15-13
 - EXAMINE/OPERANDS command, (P) *Debugger*, 15-9
 - EXAMINE/TMASK command, (P) *Debugger*, 15-13
 - examining vector instruction, (P) *Debugger*, 15-9
 - examining vector register, (P) *Debugger*, 15-4, 15-6
- Vectorized programs (cont'd)
 - masked operation, (P) *Debugger*, 15-5, 15-9, 15-13
 - obtaining information about, (P) *Debugger*, 15-2
 - setting breakpoint, (P) *Debugger*, 15-3
 - setting tracepoint, (P) *Debugger*, 15-3
 - setting watchpoint, (P) *Debugger*, 15-3
 - SET VECTOR_MODE command, (P) *Debugger*, 15-19
 - SHOW PROCESS/FULL command, (P) *Debugger*, 15-2
 - SHOW VECTOR_MODE command, (P) *Debugger*, 15-19
 - specifying vector register, (P) *Debugger*, 15-4
 - SYNCHRONIZE VECTOR_MODE command, (P) *Debugger*, 15-19
 - synchronizing scalar and vector processors, (P) *Debugger*, 15-19
 - V0 to V15, (P) *Debugger*, 15-6
 - VCR, (P) *Debugger*, 15-4
 - VLR, (P) *Debugger*, 15-4
 - VMR, (P) *Debugger*, 15-5, 15-9, 15-13
- Vectorizing FORTRAN compiler, (P) *MTH\$, 2-7*
- Vector length registers
 - See VLRs
- Vector mask registers
 - See VMRs
- Vector mode
 - SET VECTOR_MODE [NO]SYNCHRONIZED command, (P) *Debugger*, 15-19
 - SYNCHRONIZE VECTOR_MODE command, (P) *Debugger*, 15-19
- Vector-present processors, (S) *Sys Mgr Tuning*, 26-4
 - identifying, (S) *Sys Mgr Tuning*, 26-9
- Vector processing, (G) *SW Overview*, 3-5; (G) *Compatibility*, 1-12; (S) *Sys Mgr Tuning*, 26-4 to 26-9
 - monitoring, (S) *Sys Mgmt Util M-Z*, 1-58
- Vector processors
 - exception handling, (P) *Calling Std*, 6-14
 - releasing, (P) *Sys Svc II*, SYS2-203
 - restoring the exception state of, (P) *Sys Svc II*, SYS2-209
 - saving the exception state of, (P) *Sys Svc II*, SYS2-221
 - synchronization, (P) *Calling Std*, 2-8
- Vector quantum adjustment disabling option, (S) *Sys Mgmt Util M-Z*, C-34
- Vector registers, (S) *Sys Mgr Tuning*, 26-4
 - See also Registers
 - built-in symbol, (P) *Debugger*, 15-4, B-4
 - composite address expression, (P) *Debugger*, 15-16
 - depositing into, (P) *Debugger*, 15-4, 15-6

Vector registers (cont'd)

- display, screen mode, (P) *Debugger*, 11-10, 11-16, 15-22
 - examining, (P) *Debugger*, 15-4, 15-6
 - scope, (P) *Debugger*, 15-1
 - usage, (P) *Calling Std*, 2-2
 - V0 to V15, (P) *Debugger*, 15-6, B-4
 - VCR, (P) *Debugger*, 15-4, B-4
 - VLR, (P) *Debugger*, 15-4, B-4
 - VMR, (P) *Debugger*, 15-5, 15-9, 15-13, B-4
 - watchpoint, (P) *Debugger*, 15-3
- ## Vector routines
- naming conventions, (P) *MTH\$*, 2-8
 - table of entry points, (P) *MTH\$*, B-1 to B-4
- ## Vectors, (G) *SW Overview*, 3-5
- addresses, (S) *Sys Mgmt Util M-Z*, 5-7, 5-9
 - copying, (P) *MTH\$*, MTH-160
 - definition, (S) *Sys Mgr Tuning*, 26-4
 - Euclidean norm, obtaining, (P) *MTH\$*, MTH-170
 - fixed space, (S) *Sys Mgmt Util M-Z*, D-1
 - floating space, (S) *Sys Mgmt Util M-Z*, D-1
 - Givens plane rotation
 - applying, (P) *MTH\$*, MTH-173
 - generating the elements for, (P) *MTH\$*, MTH-178
 - index, obtaining, (P) *MTH\$*, MTH-149
 - inner product, obtaining, (P) *MTH\$*, MTH-165
 - multiplying, (P) *MTH\$*, MTH-155
 - scaling, (P) *MTH\$*, MTH-182
 - sum of absolute values, obtaining, (P) *MTH\$*, MTH-152
 - swapping, (P) *MTH\$*, MTH-186
- ## Vector state
- restoring, (P) *Sys Svc II*, SYS2-211
- ## vector_byte_signed data type, (P) *Interfaces*, B-16
- ## vector_byte_unsigned data type, (P) *Interfaces*, B-16
- ## /VECTOR_INSTRUCTION qualifier, (P) *Debugger*, 15-3
- ## vector_longword_signed data type, (P) *Interfaces*, B-16
- ## vector_longword_unsigned data type, (P) *Interfaces*, B-16
- ## VECTOR_MARGIN system parameter, (S) *Sys Mgr Tuning*, 26-8
- ## VECTOR_PROC system parameter, (S) *Sys Mgr Tuning*, 26-5
- ## vector_quadword_signed data type, (P) *Interfaces*, B-16
- ## vector_quadword_unsigned data type, (P) *Interfaces*, B-16
- ## /VECTOR_REGS qualifier, (P) *VAX SDA*, SDA-151
- ## vector_word_signed data type, (P) *Interfaces*, B-16

vector_word_unsigned data type, (P) *Interfaces*, B-16

Vendors

- backup sites supplied by, (S) *Dependable*, 5-11
- evaluating tradeoffs, (S) *Dependable*, 4-15 to 4-16

VERF datagram, (S) *VMScluster Sys*, F-17, F-24

Verification

See also Mount verification

- enabling during execution of command procedures, (G) *User*, 15-16

end-to-end, (S) *TCP/IP*, 2-4

modifying for command procedures, (G) *DCL N-Z*, DCLII-232

of disk volumes, (S) *Sys Mgmt Util A-L*, 3-3

startup, (S) *Sys Mgr Essentials*, 4-15

turning on during system startup, (S) *Sys Mgr Essentials*, 4-14

Verifying

network connection, (S) *DECnet Intro*, 3-29, 3-31

successful network installation, (S) *DECnet Intro*, 3-31

Verifying security triplets, (S) *DECamsd*, 1-7

/VERIFY qualifier

in Backup utility, (S) *Sys Mgmt Util A-L*, 7-62

Version dependencies

registering images, (S) *Sys Mgr Essentials*, 5-22

Version limits

for files in directory, (G) *DCL A-M*, DCLI-92

setting on files, (S) *Sys Mgr Essentials*, 8-53

Version numbers, (S) *Sys Mgr Essentials*, 9-15;

(P) *File Appl*, 1-27

assigning to files, (G) *DCL A-M*, DCLI-216

specifying, (P) *Rec Mgmt Util*, 4-20

VEST (VAX Environment Software Translator), (G) *SW Overview*, 4-6; (G) *Compatibility*, 1-4, 1-12, 3-8

See also DECmigrate for OpenVMS AXP

alignment, (P) *Concepts*, 22-8

documentation, (G) *Compatibility*, 3-9

VFC record format, (P) *File Appl*, 1-2, 1-30, 3-13

VFC records, (P) *Rec Mgmt Util*, 4-32 to 4-34

converting, (P) *Rec Mgmt Util*, 2-11

format, (P) *File Appl*, 2-11, 3-13

VFUs (variable format units)

RMS support for, (P) *RMS Ref*, 4-25; (P) *Rec Mgmt Util*, 4-33

Video attributes, (P) *Concepts*, 7-11, 7-17, 7-21

current, (P) *Concepts*, 7-17

default, (P) *Concepts*, 7-17

Video terminals

See Terminals

Videotex

See VTX

- vi editor, (G) *SW Overview*, 4-5, 5-12
- VIEW command, (G) *DCL N-Z*, DCLII-425
- Viewing groups, (S) *DECamds*, 2-4
- View menu, (S) *DECamds*, 2-4
- Viewports, (P) *Concepts*, 7-18; (P) *SMG\$*, 1-6, 2-12 to 2-13
 - in Phone, (G) *User*, 7-2
- Views
 - See also Windows
 - Breakpoint, (P) *Debugger*, 1-8, 3-10
 - Instruction, (P) *Debugger*, 3-25
 - Monitor, (P) *Debugger*, 1-8, 3-17
 - Register, (P) *Debugger*, 3-24
 - Tasking, (P) *Debugger*, 3-26
- Virtual address operator (@), (P) *Alpha SDA*, SDA-13; (P) *VAX SDA*, SDA-16
- Virtual address space, (P) *Concepts*, 19-1, 19-8, 20-2, 20-7
 - adding page to, (P) *Sys Svc I*, SYS1-153, SYS1-269
 - creating, (P) *Sys Svc I*, SYS1-153
 - deleting page from, (P) *Sys Svc I*, SYS1-193
 - increasing and decreasing, (P) *Concepts*, 19-8, 20-6
 - mapping section of, (P) *Concepts*, 19-18, 20-19
 - specifying array, (P) *Concepts*, 19-10, 20-8
 - sufficient for system dump analysis, (P) *VAX SDA*, SDA-8
- Virtual balance slots
 - See VBSs
- Virtual block dump, (P) *Rec Mgmt Util*, 1-18
- Virtual block numbers
 - See VBNs
- Virtual-block-position option, (P) *File Appl*, 4-35
- Virtual circuits, (S) *VMScluster Sys*, C-19; (S) *DECnet Mgmt*, 1-4, 1-8
 - definition, (S) *VMScluster Sys*, F-4
 - OPEN state, (S) *VMScluster Sys*, C-22
 - transmission window size, (S) *VMScluster Sys*, G-1
- Virtual devices, (G) *DCL A-M*, DCLI-212, DCLI-334
 - mounting during system startup, (S) *Sys Mgr Tuning*, 23-14
- Virtual displays, (P) *Concepts*, 7-10; (P) *SMG\$*, 1-5
 - See also Viewports
 - changing rendition of, (P) *SMG\$*, 2-9
 - checking occlusion, (P) *Concepts*, 7-13
 - creating, (P) *Concepts*, 7-11
 - creating a subprocess from, (P) *Concepts*, 7-17
 - cursor movement, (P) *Concepts*, 7-20
 - deleting, (P) *Concepts*, 7-15
 - deleting text, (P) *Concepts*, 7-22
 - drawing lines, (P) *Concepts*, 7-21
 - erasing, (P) *Concepts*, 7-15
 - ID, (P) *Concepts*, 7-11, 7-32
- Virtual displays (cont'd)
 - inserting text, (P) *Concepts*, 7-19, 7-20
 - list pasting order of, (P) *Concepts*, 7-15
 - logical cursor position, (P) *Concepts*, 7-18
 - modifying, (P) *Concepts*, 7-16
 - obtaining the pasting order, (P) *Concepts*, 7-15
 - outputting through, (P) *SMG\$*, 2-5
 - overwriting text, (P) *Concepts*, 7-19, 7-20
 - pasting, (P) *Concepts*, 7-11
 - physical cursor position, (P) *Concepts*, 7-18
 - popping, (P) *Concepts*, 7-15
 - reading data from, (P) *Concepts*, 7-23
 - reading from, (P) *SMG\$*, 2-12
 - rearranging, (P) *Concepts*, 7-14
 - saving, (P) *SMG\$*, 2-15
 - scrolling, (P) *Concepts*, 7-20
 - sharing, (P) *Concepts*, 7-32
 - specifying double-size characters, (P) *Concepts*, 7-20
 - specifying video attributes, (P) *Concepts*, 7-11
 - viewports, (P) *Concepts*, 7-18
 - writing double-width characters, (P) *Concepts*, 7-19
 - writing text to, (P) *Concepts*, 7-18
- Virtual I/O, (P) *Concepts*, 9-6
 - canceling requests for, (P) *Sys Svc I*, SYS1-77
- Virtual I/O caches, (G) *SW Overview*, 3-11; (S) *Comparison*, 5-17; (S) *VAX Perform*, 3-37, 5-12; (S) *Alpha Perform*, 18-1 to 18-3
 - adjusting size, (S) *VAX Perform*, 3-38
 - caching policies, (S) *VAX Perform*, 3-37
 - disabling, (S) *VAX Perform*, 3-38
 - enabling, (S) *VAX Perform*, 3-38
 - memory allocation, (S) *VAX Perform*, 3-39
 - memory reclamation, (S) *VAX Perform*, 3-39
 - objects, (S) *VAX Perform*, 3-37
 - statistics, (S) *VAX Perform*, 3-37
 - VAXcluster configurations, (S) *VAX Perform*, 3-39
- Virtual keyboards, (P) *SMG\$*, 1-7, 3-1 to 3-2
 - reading data from, (P) *Concepts*, 7-23, 7-24
- Virtual memory
 - allocating for images, (P) *Linker*, 1-2, 3-17
 - examining contents, (G) *DCL A-M*, DCLI-209
 - replacing contents, (G) *DCL A-M*, DCLI-147
 - returning statistics, (P) *LIB\$*, LIB-425
 - showing statistics, (P) *LIB\$*, LIB-390
- Virtual memory address
 - See Addresses
- VIRTUAL option, (P) *File Appl*, 4-35
- VIRTUALPAGECNT system parameter, (P) *VAX SDA*, SDA-8
 - optimizing batch queues for Sort/Merge utility, (S) *Sys Mgr Essentials*, 13-32
- Virtual page size, (P) *Concepts*, 19-1

Virtual performance monitor

See VPM

Virtual terminal protocols, (S) *Sys Mgr Tuning*, 21-13; (S) *TCP/IP*, 3-2, 5-1

Virtual terminals, (S) *Security*, 7-25, 12-15; (S) *DECnet Intro*, 3-25; (S) *DECnet Mgmt*, 1-9, 5-17

See also Terminals

connecting, (G) *DCL A-M*, DCLI-60; (S) *Sys Mgr Essentials*, 7-11

disabling, (G) *User*, 2-8; (S) *Security*, 3-6

disconnected processes and, (G) *User*, 18-8, 18-9; (S) *Security*, 3-20

disconnecting from, (G) *DCL A-M*, DCLI-176

enabling, (S) *DECnet Mgmt*, 5-15

logging out of, (S) *Security*, 3-20

managing disconnected processes, (G) *User*, 18-9

purpose of, (S) *Sys Mgr Essentials*, 7-11

reconnecting to disconnected processes, (G) *User*, 18-8

restrictions, (G) *User*, 18-9

Virtual units

definition, (S) *VMScluster Sys*, 6-22

distributed, (S) *VMScluster Sys*, 6-25

Viruses, (S) *Security*, 8-24

cause of disasters, (S) *Dependable*, 5-8

effect on site security, (S) *Dependable*, 5-5

Visible processes, (P) *Debugger*, 14-2, 14-3, 14-8

/VISIBLE qualifier, (P) *Debugger*, 16-11

%VISIBLE_PROCESS built-in symbol, (P) *Debugger*, 14-11

%VISIBLE_TASK built-in symbol, (P) *Debugger*, 16-11, 16-15

VLRs (vector length registers), (S) *Sys Mgr Tuning*, 26-4; (P) *Debugger*, 15-4, B-4

VMB.EXE file, (S) *Sys Mgr Essentials*, 4-18
role in boot process, (S) *Sys Mgr Essentials*, 4-2

VMEbus, (G) *SW Overview*, 1-6

VMRs (vector mask registers), (S) *Sys Mgr Tuning*, 26-4; (P) *Debugger*, 15-4, 15-5, 15-9, 15-13, B-4

VMR utility, (S) *DECnet Mgmt*, 4-15

VMS\$AUDIT_SERVER.DAT file

authorization elements, (S) *VMScluster Sys*, 5-12

VMS\$LAYERED.DAT file, (S) *Sys Mgr Essentials*, 5-19
function in startup procedure, (S) *Sys Mgr Essentials*, 5-18

VMS\$OBJECTS.DAT file, (S) *Security*, 11-6
authorization elements, (S) *VMScluster Sys*, 5-16

VMS\$PASSWORD_DICTIONARY.DATA file
authorization elements, (S) *VMScluster Sys*, 5-16

VMS\$PASSWORD_HISTORY.DATA file

authorization elements, (S) *VMScluster Sys*, 5-16

VMS\$PASSWORD_POLICY.EXE file

authorization elements, (S) *VMScluster Sys*, 5-17

VMS\$PHASES.DAT file

in startup procedure, (S) *Sys Mgr Essentials*, 5-4, 5-18

VMS\$SYSTEM_IMAGES.IDX

adding an entry, (S) *Sys Mgmt Util M-Z*, 6-75
removing an entry, (S) *Sys Mgmt Util M-Z*, 6-76

VMS\$VMS.DAT file

in startup procedure, (S) *Sys Mgr Essentials*, 5-18

VMScluster Console System

See VCS

VMScluster environments, (P) *File Appl*, 3-32

alias node identifier, (G) *SW Overview*, 3-18

alternate adapter booting, (S) *Dependable*, 7-9
application environment topologies, (S)

Dependable, 8-13

availability, (G) *SW Overview*, 7-2

batch queues, (G) *SW Overview*, 1-8

CI, (G) *SW Overview*, 1-8

client/server capabilities, (P) *Environment*, 3-2

cluster-accessible disks, (G) *SW Overview*, 1-7

cluster-accessible tapes, (G) *SW Overview*, 1-7

cluster aliases supported on Alpha systems, (S) *Comparison*, 6-1

clusterwide queue manager, (S) *Dependable*, 8-28

common system disks, (S) *Dependable*, 9-22

computing capabilities, (G) *SW Overview*, 6-1

configuration recommendations for

dependability, (S) *Dependable*, 7-5

configurations, (G) *SW Overview*, 1-4, 1-7

configurations with three LAN segments, (S) *Dependable*, 7-7

configurations with two LAN segments, (S) *Dependable*, 7-6

connection manager, (G) *SW Overview*, 3-18

database failover in, (S) *Dependable*, 8-35

data servers, (G) *SW Overview*, 6-17

disk servers, (G) *SW Overview*, 3-18, 6-17
dismounting volumes on, (G) *DCL A-M*,

DCLI-179

displaying SDA information, (P) *Alpha SDA*, SDA-80

distributed file system, (G) *SW Overview*, 3-18

distributed lock manager, (G) *SW Overview*, 3-18

DSSI, (G) *SW Overview*, 1-8

dual-architecture configurations, (G) *SW Overview*, 1-7

execution queues, (G) *SW Overview*, 3-18

FDDI adapter support, (S) *Dependable*, 7-5

VMScluster environments (cont'd)

- features, (S) *Comparison*, 2-2
- Fiber Distributed Data Interface (FDDI), (S) *Dependable*, 6-17
- generic queues, (G) *SW Overview*, 3-18
- hardware, (G) *SW Overview*, 1-8
- hardware topologies, (S) *Dependable*, 6-10
- HSC, (G) *SW Overview*, 1-8
- interconnects, (G) *SW Overview*, 1-8
- LAN address for satellite, (S) *Dependable*, 7-9
- locking considerations, (P) *File Appl*, 3-33
- management tools, (G) *SW Overview*, 7-9
- managing, (G) *SW Overview*, 2-15, 3-13, 3-17
- mixed interconnect, (S) *Dependable*, 6-19
- mixed-interconnect, (G) *SW Overview*, 1-8
- multiple-site data center, (S) *Dependable*, 5-11, 6-17, 7-12
- network failure analysis program, (S) *Dependable*, 7-9 to 7-12
- operating system support of, (S) *Dependable*, 9-22
- PATHWORKS support for, (G) *SW Overview*, 6-23
- preparing for UETP, (S) *Sys Mgr Tuning*, 17-11
- print queues, (G) *SW Overview*, 1-8
- queue manager, (G) *SW Overview*, 3-18
- queue manager in, (S) *Dependable*, 8-28
- quorum disk, (S) *Dependable*, 9-22
- resource access, (G) *SW Overview*, 3-18
- resource locking, (G) *SW Overview*, 3-18
- restriction for using multiple queue managers, (S) *Comparison*, 3-7
- sample programs for LAN environments, (S) *Dependable*, 7-9
- satellite booting, (S) *Dependable*, 7-9
- servers, (G) *SW Overview*, 6-17; (P) *Environment*, 3-3
- shared disk resources, (G) *SW Overview*, 3-18
- shared processing and printer resources, (G) *SW Overview*, 3-18
- software, (G) *SW Overview*, 1-8, 3-17
- software components, (G) *SW Overview*, 3-17
- specifying cluster size on disk, (G) *DCL A-M*, DCLI-250
- surviving LAN bridge failover, (S) *Dependable*, 7-9
- symmetric multiprocessing supported on Alpha systems, (S) *Comparison*, 2-18
- System Communications Services (SCS), (G) *SW Overview*, 3-18
- tape servers, (G) *SW Overview*, 3-18, 6-17
- test failure during UETP, (S) *Sys Mgr Tuning*, 17-26
- using with SYSMAN commands, (S) *Sys Mgmt Util M-Z*, 6-6 to 6-31
- VAXport driver, (G) *SW Overview*, 3-18

VMScluster sample programs, (S) *VMScluster Sys*, D-1

- LAVC\$FAILURE_ANALYSIS.MAR, (S) *VMScluster Sys*, D-3
- LAVC\$START_BUS.MAR, (S) *VMScluster Sys*, D-1
- LAVC\$STOP_BUS.MAR, (S) *VMScluster Sys*, D-2

VMScluster systems, (G) *Compatibility*, 2-1

- See also Alias node identifiers and VAXcluster environments
- adjusting quorum after shutting down a node, (S) *Sys Mgr Essentials*, 4-29
- alias node identifier, (S) *DECnet Intro*, 3-18
- alias node names, (S) *DECnet Intro*, 2-4, 3-8
- application development guidelines, (G) *Compatibility*, 4-15
- architecture, (S) *VMScluster Sys*, 2-1
- ATM communications service, (G) *V6.2 New Feat*, 8-5
- ATM multisite system management, (G) *V6.2 New Feat*, 8-12
- autostart queues in, (S) *Sys Mgr Essentials*, 13-4
- background, (S) *VMScluster Sys*, 1-1
- benefits, (S) *VMScluster Sys*, 1-2
- benefits of, (S) *Sys Mgr Tuning*, 20-1
- boot events, (S) *VMScluster Sys*, C-2
- booting with LANCP instead of DECnet, (G) *V6.2 New Feat*, 3-10
- CI connection, (S) *DECnet Intro*, 1-8
- client software licensing, (G) *V6.2 New Feat*, 3-7
- cluster-accessible disks, (S) *VMScluster Sys*, 1-3
- cluster-accessible tapes, (S) *VMScluster Sys*, 1-3
- cluster aliases supported on OpenVMS Alpha systems, (G) *Compatibility*, 2-6
- cluster group number and password, (S) *VMScluster Sys*, 10-16
- CLUSTER_CONFIG.COM, (G) *V6.2 New Feat*, 7-26
- common-environment, (S) *VMScluster Sys*, 5-2
- coordinating system files, (S) *VMScluster Sys*, 5-17
- common parameter files in, (S) *Sys Mgr Tuning*, 14-22
- common SYSUAF.DAT file, (S) *VMScluster Sys*, 10-18
- configurations, (S) *VMScluster Sys*, 8-4; (S) *DECnet Mgmt*, 1-10
- Refer also to the *Guidelines for VMScluster Configurations*
- adding nodes to set up a large, (S) *VMScluster Sys*, 9-1
- changing, (S) *VMScluster Sys*, 8-21

VMScluster systems

configurations (cont'd)

- keeping records, (S) *VMScluster Sys*, 10-4
- reconfiguring, (S) *VMScluster Sys*, 8-33
- configuration support, (G) *Compatibility*, 2-10
- configuration types, (S) *VMScluster Sys*, 3-1
- cross-architecture booting, (G) *V6.2 New Feat*, 6-30; (S) *Sys Mgr Tuning*, 22-23
- DECnet network functions, (S) *VMScluster Sys*, 1-6
- defining in SYSMAN, (S) *Sys Mgr Essentials*, 2-15
- defining location of queue database files, (S) *Sys Mgr Essentials*, 12-5
- definition, (S) *VMScluster Sys*, 1-1
- determining allocation class values, (S) *VMScluster Sys*, 6-6
- device names, (G) *User*, 12-10
 - allocation class fields, (G) *User*, 12-10
 - dual-pathed, (G) *User*, 12-10
 - format, (G) *User*, 12-10
- device names in, (S) *Sys Mgr Essentials*, 7-1
- disks in, (S) *Sys Mgr Essentials*, 8-2
- dismounting a volume, (S) *Sys Mgr Essentials*, 8-45
- distributed file system, (S) *VMScluster Sys*, 1-4, 2-17
- distributed job controller, (S) *VMScluster Sys*, 1-4, 2-19
- distributed lock manager, (S) *VMScluster Sys*, 1-4, 2-15
- distributed processing, (S) *VMScluster Sys*, 5-1
- downline load sequence originating from, (S) *DECnet Mgmt*, 4-3
- DS3 communications service, (G) *V6.2 New Feat*, 8-5
- DS3 system management, (G) *V6.2 New Feat*, 8-12
- dual-architecture
 - installing images, (S) *Sys Mgr Tuning*, 20-20, 20-21
- end node, (S) *DECnet Mgmt*, 1-10, 2-21
- executing commands in, (S) *Sys Mgr Essentials*, 2-11
- file specifications, (S) *DECnet Intro*, 2-4
- generic batch queues in, (S) *Sys Mgr Essentials*, 13-7
- generic output queues in, (S) *Sys Mgr Essentials*, 13-12
- generic queues in, (S) *Sys Mgr Essentials*, 13-2
- hardware components, (S) *VMScluster Sys*, 1-2
- hosts, nodes, and computers, (G) *V6.2 New Feat*, 7-1
- including in groups, (S) *DECamds*, 1-7
- in network environment, (S) *Sys Mgr Tuning*, 21-6
- installing licenses, (S) *VMScluster Sys*, 4-5
- installing SCSI, (G) *V6.2 New Feat*, 7-19

VMScluster systems (cont'd)

- interconnects, (S) *VMScluster Sys*, 1-3
- interoperability, (G) *Compatibility*, 2-8
- interprocessor communications, (S) *VMScluster Sys*, 6-24
- LAN (local area network) connection, (S) *DECnet Intro*, 1-8
- LAN management enhancements, (G) *V6.2 New Feat*, 6-1; (S) *Sys Mgr Tuning*, 22-1
- LAN MOP coexisting with DECnet MOP, (G) *V6.2 New Feat*, 6-28; (S) *Sys Mgr Tuning*, 22-20
- limiting nodes that can run the queue manager, (S) *Sys Mgr Essentials*, 12-9
- local and nonlocal, (S) *Sys Mgr Essentials*, 2-15
- local resources, (S) *VMScluster Sys*, 5-2
- LOGINOUT determination of process quota values, (S) *VMScluster Sys*, 10-18
- maintenance, (S) *VMScluster Sys*, 10-1
- managing shared queues, (S) *VMScluster Sys*, 7-1
- managing with SYSMAN, (S) *Sys Mgr Tuning*, 20-16 to 20-23
- maximum number of shadow sets, (S) *VMScluster Sys*, 6-25
- members, (S) *VMScluster Sys*, 1-3
- membership management, (S) *VMScluster Sys*, 2-14
- migrating from DECnet MOP to LAN MOP, (G) *V6.2 New Feat*, 6-28; (S) *Sys Mgr Tuning*, 22-20
- monitoring LAN activity, (S) *VMScluster Sys*, 10-25
- monitoring with SHOW CLUSTER, (S) *Sys Mgr Tuning*, 20-4
- mounting volumes in, (S) *Sys Mgr Essentials*, 8-21
- moving the queue manager to another node, (S) *Sys Mgr Essentials*, 12-10
- MSCP server in, (S) *VMScluster Sys*, 1-4, 2-17
- multiple-environment, (S) *VMScluster Sys*, 5-3
- startup functions, (S) *VMScluster Sys*, 5-10
- multiple-site, (G) *V6.2 New Feat*, 8-1
- node address, (S) *DECnet Intro*, 3-8, 3-12
- node name, (S) *DECnet Intro*, 3-8, 3-12
- node restriction for a startup command procedure, (S) *Sys Mgr Essentials*, 5-19
- nodes, (S) *DECnet Intro*, 1-8
- operating environments, (S) *VMScluster Sys*, 5-2
- partitioning, (S) *VMScluster Sys*, 2-5
- password, (S) *VMScluster Sys*, 10-16, F-17, F-25
- preparing the operating environment, (S) *VMScluster Sys*, 4-1

VMScluster systems (cont'd)

- print and batch queues in, (S) *Sys Mgr Tuning*, 20-2
- quorum disk, (S) *VMScluster Sys*, 2-8
- remote monitoring limitation, (S) *Sys Mgr Tuning*, 18-43
- router, (S) *DECnet Mgmt*, 1-10, 2-21
- SCSI configuration requirements, (G) *V6.2 New Feat*, 7-3
- SCSI hardware configurations, (G) *V6.2 New Feat*, 7-9
- SCSI performance, (G) *V6.2 New Feat*, 7-6
- SCSI storage connected to a single host, (G) *V6.2 New Feat*, 7-2
- SCSI storage connected to multiple hosts, (G) *V6.2 New Feat*, 7-2
- SCSI storage interconnect, (G) *V6.2 New Feat*, 7-1
- security, (S) *Sys Mgr Tuning*, 20-16
- security log files in, (S) *Sys Mgr Tuning*, 18-30
- security management, (S) *VMScluster Sys*, 5-10, 10-15
- sending mail over the network, (S) *DECnet Intro*, 2-11
- serving SCSI tapes, (G) *V6.2 New Feat*, 3-8
- setting up for LAN MOP, (G) *V6.2 New Feat*, 6-29; (S) *Sys Mgr Tuning*, 22-22
- shadowing across, (S) *VMScluster Sys*, 6-24
- shared processing and printer resources, (S) *VMScluster Sys*, 5-1
- shared resources, (S) *Sys Mgr Tuning*, 20-1
- shared SCSI storage concepts, (G) *V6.2 New Feat*, 7-5
- shutdown, (S) *VMScluster Sys*, 10-22
- shutting down an entire VMScluster, (S) *Sys Mgr Essentials*, 4-29
- single security domain, (S) *VMScluster Sys*, 5-10
- specifying location of queue database, (S) *Sys Mgr Essentials*, 12-6
- specifying preferred order of queue manager nodes, (S) *Sys Mgr Essentials*, 12-9
- SYSMAN management environment, (S) *Sys Mgr Essentials*, 2-12
- System Communications Services (SCS), (S) *VMScluster Sys*, C-19
- system management, (S) *Sys Mgr Tuning*, 20-3
- system management overview, (S) *VMScluster Sys*, 1-7
- TMSCP server in, (S) *VMScluster Sys*, 1-4, 2-18
- tools and utilities, (S) *VMScluster Sys*, 1-8
- troubleshooting, (S) *VMScluster Sys*, C-1
- updating AGEN\$ files, (S) *VMScluster Sys*, 8-36
- updating MODPARAMS.DAT files, (S) *VMScluster Sys*, 8-36

VMScluster systems (cont'd)

- use of an alias node identifier, (S) *DECnet Mgmt*, 1-11, 2-5, 2-26, 3-9, 8-8
- use of DECnet data link, (S) *DECnet Mgmt*, 1-10
- using CLUSTER_CONFIG.COM, (S) *Sys Mgr Tuning*, 20-2
- using CLUSTER_CONFIG to set up LAN MOP, (G) *V6.2 New Feat*, 6-29; (S) *Sys Mgr Tuning*, 22-21
- using FDDI, (G) *V6.2 New Feat*, 8-4
- using LANCP as booting mechanism, (G) *V6.2 New Feat*, 3-10
- using the DS3 interconnect, (G) *V6.2 New Feat*, 3-7
- using the SCSI interconnect, (G) *V6.2 New Feat*, 3-6
- voting member, (S) *VMScluster Sys*, 2-6
 - adding, (S) *VMScluster Sys*, 8-10, 8-33
 - removing, (S) *VMScluster Sys*, 8-19, 8-33
- WAN multisite system management, (G) *V6.2 New Feat*, 8-12
- workload balancing, (S) *VMScluster Sys*, 5-1
- VMSIMAGES.DAT file, (S) *Sys Mgmt Util A-L*, 6-7
- VMSINSTAL (VAX only) installation requirements, (S) *DECams*, A-4
- VMSINSTAL.COM command procedure
 - Refer also to the *OpenVMS Developer's Guide to VMSINSTAL*
 - See also Installation procedures and Installing software
 - Alternate System Root option, (S) *Sys Mgr Essentials*, 3-18
 - restriction, (S) *Sys Mgr Essentials*, 3-18
 - Alternate Working Device option, (S) *Sys Mgr Essentials*, 3-14
 - answer file, (S) *Sys Mgr Essentials*, 3-14
 - Autoanswer option, (S) *Sys Mgr Essentials*, 3-14
 - BACKUP qualifiers, (S) *Sys Mgr Essentials*, 3-16
 - command line syntax, (S) *Sys Mgr Essentials*, 3-9
 - completing installation, (S) *Sys Mgr Essentials*, 3-13
 - correcting problems, (S) *Sys Mgr Essentials*, 3-9
 - creating new answer file, (S) *Sys Mgr Essentials*, 3-14
 - destination parameter, (S) *Sys Mgr Essentials*, 3-12
 - File Log option, (S) *Sys Mgr Essentials*, 3-17
 - Get Save Set option, (S) *Sys Mgr Essentials*, 3-15, 3-16
 - getting help in, (S) *Sys Mgr Essentials*, 3-9
 - installing layered products, (S) *Sys Mgr Essentials*, 3-6

VMSINSTAL.COM command procedure (cont'd)

- options, (S) *Sys Mgr Essentials*, 3-13
 - option list parameter, (S) *Sys Mgr Essentials*, 3-12
 - specifying, (S) *Sys Mgr Essentials*, 3-12
 - table of, (S) *Sys Mgr Essentials*, 3-11
 - preparing to use, (S) *Sys Mgr Essentials*, 3-6
 - product list parameter, (S) *Sys Mgr Essentials*, 3-9
 - product save-set format, (S) *Sys Mgr Essentials*, 3-16
 - Release Notes option, (S) *Sys Mgr Essentials*, 3-17
 - saving answers, (S) *Sys Mgr Essentials*, 3-14
 - source parameter, (S) *Sys Mgr Essentials*, 3-11
 - starting, (S) *Sys Mgr Essentials*, 3-9
 - system failure
 - conditions for, (S) *Sys Mgr Essentials*, 3-13
 - system shutdown following, (S) *Sys Mgr Essentials*, 3-13
 - temporary working directory
 - specifying location of, (S) *Sys Mgr Essentials*, 3-14
- ## VMSINSTAL.HISTORY history file, (S) *Comparison*, 2-25
- ## VMSINSTAL command procedure, (G) *SW Overview*, 3-7
- ## VMSINSTAL utility, (S) *Comparison*, 2-24
- ## VMSKITBLD.COM command procedure
- ADD option, (S) *Sys Mgr Essentials*, 2-31
 - BUILD option, (S) *Sys Mgr Essentials*, 2-27
 - compared to CLUSTER_CONFIG.COM command procedure, (S) *Sys Mgr Essentials*, 2-31
 - completing a system disk created with the BUILD option, (S) *Sys Mgr Essentials*, 2-29
 - configuring a system root added with, (S) *Sys Mgr Essentials*, 2-32
 - copying system files from the system disk, (S) *Sys Mgr Essentials*, 2-26
 - COPY option, (S) *Sys Mgr Essentials*, 2-29
 - options, (S) *Sys Mgr Essentials*, 2-26
 - reliance on .TEMPLATE version of site-specific command procedures, (S) *Sys Mgr Essentials*, 5-3
- ## VMSMAIL logical name
- defining to reduce system disk I/O, (S) *Sys Mgr Tuning*, 16-8
- ## VMSMAIL_PROFILE.DATA file, (S) *Sys Mgr Essentials*, 6-38
- authorization elements, (S) *VMScluster Sys*, 5-16
 - moving to reduce system disk I/O, (S) *Sys Mgr Tuning*, 16-8

VMSMAIL_PROFILE logical name

- defining during system startup, (S) *Sys Mgr Essentials*, 5-8

VMSTAILOR

- See Tailoring utility

- Volatile databases, (S) *DECnet Mgmt*, 1-13, 3-2
- copying node entries, (S) *DECnet Mgmt*, 3-18
- display information, (S) *DECnet Mgmt*, 3-73
- network, (S) *Security*, 12-16; (S) *Sys Mgr Tuning*, 21-11; (S) *DECnet Intro*, 3-10, 3-18, 3-26

- use of, (S) *DECnet Mgmt*, 3-2

- VOLPRO (Volume Protection Override), (G) *User*, 12-5

- VOLPRO privilege, (S) *Security*, 5-21, A-18; (S) *Sys Mgr Essentials*, 8-14

- VOLSET.SYS file, (P) *File Appl*, 1-8

- See Volume sets, list file

- Volume, (S) *DECcmds*, 3-6, 3-8

- default data collection, (S) *DECcmds*, 5-2

- Volume accessibility fields

- writing characters to, (G) *DCL A-M*, DCLI-253

- VOLUME attribute, (P) *Rec Mgmt Util*, 4-8; (P) *File Appl*, 4-36

- Volume default extension quantity, (P) *File Appl*, 3-5, 3-7

- Volume identifier field, (S) *Sys Mgr Essentials*, 8-39; (P) *File Appl*, 1-25

- Volume integrity, (S) *Sys Mgr Essentials*, 8-58

- Volume labels

- assigning to devices, (S) *Sys Mgr Essentials*, 5-11

- changing, (S) *Sys Mgr Essentials*, 3-33

- definition, (S) *Sys Mgr Essentials*, 10-56

- EOF (end-of-file) label, (P) *File Appl*, 1-20

- EOV (end-of-volume) label, (P) *File Appl*, 1-20

- format, (S) *Sys Mgr Essentials*, 8-24

- modifying for satellite's local disk, (S)

- VMScluster Sys*, 8-6

- specifying for magnetic tape, (S) *Sys Mgr Essentials*, 10-14

- used with BACKUP command, (S) *Sys Mgr Essentials*, 10-56

- VOL1 label, (P) *File Appl*, 1-22

- accessibility field, (P) *File Appl*, 1-25

- volume identifier field, (P) *File Appl*, 1-25

- VOL label, (P) *File Appl*, 1-20

- Volume-number option, (P) *File Appl*, 4-36

- /VOLUME qualifier

- in Backup utility, (S) *Sys Mgmt Util A-L*, 7-63

- Volume quota file

- See Disk quotas

- Volumes, (G) *User*, 12-2; (P) *File Appl*, 1-5

- See also Disk volumes, Public volumes, and Tape volumes

- access requirements, (S) *Security*, 5-5

Volumes (cont'd)

- adding to an existing disk set, (S) *Sys Mgr Essentials*, 8-34
- advantages of using separate, (S) *Sys Mgr Essentials*, 8-30
- allocating map pointers for file windows, (S) *Sys Mgmt Util M-Z*, 2-39
- as protected objects, (S) *Security*, 4-10
- auditing mounts or dismounts, (S) *Security*, 9-7
- availability
 - OPCOM message, (S) *Sys Mgr Essentials*, 8-59
- binding into volume set, (S) *Sys Mgr Essentials*, 8-22
- canceling mount verification, (S) *Sys Mgr Essentials*, 8-62
- continuation, (S) *Sys Mgr Essentials*, 8-41
- controlling cache size, (S) *Sys Mgr Essentials*, 8-58
- deleting disk files, (G) *DCL A-M, DCLI*-131
- disabling mount messages, (S) *Sys Mgr Essentials*, 8-23
- dismounting, (G) *User*, 12-10, 12-11; (S) *Sys Mgr Essentials*, 8-43, 10-16; (S) *Sys Mgmt Util M-Z*, 2-38; (P) *Sys Svc I*, SYS1-207
 - allocated devices, (G) *User*, 12-11
 - restriction, (S) *Sys Mgr Tuning*, 16-18
- dismounting disk and tape, (G) *DCL A-M, DCLI*-178
- displaying disk quota, (G) *DCL N-Z, DCLII*-331
- displaying information, (G) *User*, 12-2
- dumping, (G) *DCL A-M, DCLI*-182
- erasing data, (S) *Security*, 8-28
- events audited, (S) *Security*, 5-21
- file configurations, (P) *File Appl*, 1-22
- Files-11, (S) *Sys Mgr Essentials*, 8-3
 - modifying characteristics of, (G) *DCL N-Z, DCLII*-235
 - recording name on, (G) *DCL N-Z, DCLII*-237
- foreign
 - copying files to and from, (S) *Sys Mgr Essentials*, 9-24
 - mounting, (S) *Sys Mgr Essentials*, 8-21, 9-13
- foreign, access requirements, (S) *Security*, 5-5
- getting information asynchronously, (P) *Sys Svc I*, SYS1-325
- getting information synchronously, (P) *Sys Svc I*, SYS1-345
- group, (S) *Sys Mgr Essentials*, 8-8
- initializing, (G) *User*, 12-4; (G) *DCL A-M, DCLI*-248; (S) *Sys Mgr Essentials*, 8-10, 10-13
- initializing from within a program, (P) *Concepts*, 9-36; (P) *Sys Svc II*, SYS2-113

Volumes

- initializing from within a program (cont'd)
 - example, (P) *Concepts*, 9-36
- label, (G) *DCL A-M, DCLI*-248
- label format, (G) *User*, 12-8
- making for group, (S) *Sys Mgmt Util M-Z*, 2-21
- mounting, (G) *User*, 12-6; (S) *Sys Mgr Essentials*, 8-28, 10-15; (S) *Sys Mgmt Util M-Z*, 2-4; (P) *Concepts*, 9-33; (P) *Sys Svc II*, SYS2-145
 - continuation tape, (S) *Sys Mgr Essentials*, 8-40
 - foreign, (G) *User*, 12-7
 - from a subprocess, (S) *Sys Mgmt Util M-Z*, 2-3
 - if device is unavailable, (S) *Sys Mgr Essentials*, 8-27
 - magnetic tape, (G) *User*, 12-7, 12-8
 - operator functions, (S) *Sys Mgr Essentials*, 8-18
 - public, (S) *Sys Mgr Essentials*, 8-20
 - steps, (S) *Sys Mgr Essentials*, 8-27
- mounting foreign, (S) *Sys Mgmt Util M-Z*, 2-20
- mounting with operator assistance, (S) *Sys Mgmt Util M-Z*, 2-8
- mounting without HDR2 labels, (P) *File Appl*, 1-31
- mounting with shadowing, (S) *Sys Mgmt Util M-Z*, 2-16, 2-17
- mount verification aborted
 - OPCOM message, (S) *Sys Mgr Essentials*, 8-63
- mount verification timeout, (S) *Sys Mgr Essentials*, 8-60
 - OPCOM message, (S) *Sys Mgr Essentials*, 8-60
- multidisk, (P) *File Appl*, 3-24
- nonstandard format, (S) *Sys Mgmt Util M-Z*, 2-20
- operator assistance, (G) *User*, 12-6
- operator-assisted mount, (S) *Sys Mgr Essentials*, 8-28
- owner field, (P) *File Appl*, 1-25
- ownership, (S) *Sys Mgmt Util M-Z*, 2-36
- positioning, (P) *File Appl*, 3-24
- private, (G) *User*, 12-2; (S) *Sys Mgr Essentials*, 8-9
- privilege requirements, (S) *Security*, 5-21
- profile storage, (S) *Security*, 5-21
- protecting, (G) *DCL A-M, DCLI*-255
- protection, (S) *Security*, 5-20; (S) *Sys Mgr Essentials*, 8-14; (P) *Concepts*, 9-4
 - mounting with shadowing, (S) *Sys Mgmt Util M-Z*, 2-34
- ownership, (S) *Sys Mgmt Util M-Z*, 2-29
- processor, (S) *Sys Mgmt Util M-Z*, 2-30
- recovery, (S) *Sys Mgmt Util M-Z*, 2-32

Volumes

protection (cont'd)

- user quotas, (S) *Sys Mgmt Util M-Z*, 2-32
- with MOUNT command, (S) *Sys Mgmt Util M-Z*, 2-27, 2-31, 2-39

public

- creating, (S) *Sys Mgmt Util M-Z*, 2-36

rebuild

- determining if needed, (S) *Sys Mgr Essentials*, 7-4

rebuilding, (S) *Sys Mgr Essentials*, 8-50

recovering from errors, (S) *Sys Mgr Essentials*, 8-60

repairing errors on a disk volume, (S) *Sys Mgmt Util A-L*, 3-11

reusing in C2 systems, (S) *Security*, C-9

security elements of, (S) *Security*, 5-20

sharing, (S) *Sys Mgr Essentials*, 8-23; (S) *Sys Mgmt Util M-Z*, 2-35

specifying maximum file number, (G) *DCL A-M*, DCLI-253

specifying ownership, (G) *DCL A-M*, DCLI-255

standard ANSI and Files-11 format, (S) *Sys Mgmt Util M-Z*, 2-23

substituting, (S) *Sys Mgr Essentials*, 8-27

template profile, (S) *Security*, 5-21

types of access, (S) *Security*, 5-21

write protection, (S) *Sys Mgmt Util M-Z*, 2-39

Volume security profile

reserved file, (S) *Sys Mgr Tuning*, A-9

SECURITY.SYS, (S) *Sys Mgr Tuning*, A-9

Volume sets, (P) *File Appl*, 1-5

adding a volume to, (S) *Sys Mgmt Util M-Z*, 2-11

and MOUNT command, (S) *Sys Mgmt Util M-Z*, 2-5

backing up, (S) *Sys Mgr Essentials*, 10-40

CD-ROM

partially mounted ISO 9660, (S) *Sys Mgr Essentials*, 8-35

characteristics, (S) *Sys Mgr Essentials*, 8-30

creating, (S) *Sys Mgr Essentials*, 8-22, 8-30; (S) *Sys Mgmt Util M-Z*, 2-11

definition, (G) *User*, 12-8; (S) *Sys Mgr Essentials*, 8-2, 8-30

disk, (S) *Sys Mgr Essentials*, 8-31 to 8-34

dismounting, (G) *DCL A-M*, DCLI-180

for improving performance, (P) *File Appl*, 3-10

image save operation, (S) *Sys Mgmt Util A-L*, 7-36

list file, (S) *Sys Mgr Tuning*, A-9; (P) *File Appl*, 1-8

loosely coupled, (P) *File Appl*, 1-8

mounting, (G) *User*, 12-6; (S) *Sys Mgr Essentials*, 8-31

privileges to access, (S) *Sys Mgr Essentials*, 8-32

Volume sets (cont'd)

processing continuation volumes, (S) *Sys Mgr Essentials*, 8-37

restoring, (S) *Sys Mgr Essentials*, 10-47

restriction for system disk, (S) *Sys Mgr Essentials*, 8-31

root volume, (S) *Sys Mgr Essentials*, 8-31

shadowed, (S) *VMScluster Sys*, 6-24

tape, (S) *Sys Mgr Essentials*, 8-6, 8-36 to 8-40

to minimize disk head competition, (P) *File Appl*, 3-24

VOLSET.SYS file, (S) *Sys Mgr Tuning*, A-9

Volume shadowing, (G) *SW Overview*, 3-19, 7-6;

(S) *Sys Mgr Essentials*, 10-40, 10-47

Refer also to the *Volume Shadowing for OpenVMS*

and multiple system disks, (S) *VMScluster Sys*, 9-17

concepts, (S) *VMScluster Sys*, 6-22

data availability, (G) *SW Overview*, 2-12, 7-3

defined, (S) *VMScluster Sys*, 6-23

geometry-based shadowing device recognition, (G) *V6.2 New Feat*, 3-4

interprocess communication, (S) *VMScluster Sys*, 6-24

mounting disks in host-based shadow set, (S) *Sys Mgr Essentials*, 10-42

new features, (G) *V6.2 New Feat*, 3-4

overview, (S) *VMScluster Sys*, 6-22

providing high data availability, (S)

Dependable, 8-19

RAID, (S) *Sys Mgr Essentials*, 10-40

RAID support, (G) *V6.2 New Feat*, 3-6

recovery from device failures, (S) *Dependable*, 8-21t

redundant storage devices, (S) *Dependable*, 4-4

shadow set configurations, (S) *Dependable*, 8-23

shadow set numbers, (G) *V6.2 New Feat*, 3-5

guidelines, (G) *V6.2 New Feat*, 3-5

shadow sets, (S) *VMScluster Sys*, 3-11

to support dependable computing, (S) *Dependable*, 8-12

virtual units, (S) *VMScluster Sys*, 6-25

Volume structure

ISO 9660, (S) *Sys Mgr Essentials*, 8-3

Volume switching

automatic, (S) *Sys Mgr Essentials*, 8-39

Voluntary decrementing, (S) *Alpha Perform*, 6-13

disabling, (S) *VAX Perform*, 5-6; (S) *Alpha Perform*, 17-5

oscillations, (S) *VAX Perform*, 4-12; (S) *Alpha Perform*, 13-6

tuning, (S) *VAX Perform*, 5-7; (S) *Alpha Perform*, 17-6

turning on, (S) *VAX Perform*, 5-7; (S) *Alpha Perform*, 17-6

Votes, (P) *Alpha SDA*, SDA-80
 VOTES system parameter, (S) *VMScluster Sys*, 2-6, A-4
 Voting members
 adding, (S) *VMScluster Sys*, 8-10
 adding and removing, (S) *VMScluster Sys*, 8-33
 removing, (S) *VMScluster Sys*, 8-19, 8-33
 VPM\$SERVER account
 enabling default access, (S) *DECnet Mgmt*, 2-26, 5-3, 5-6
 VPM (virtual performance monitor)
 default access account, (S) *DECnet Intro*, 3-13
 VPM\$SERVER account
 default access, (S) *DECnet Mgmt*, 5-3, 5-6
 VPM objects, (S) *DECnet Mgmt*, 2-26
 VT100-series terminals
 clearing screen, (G) *User*, 2-25; (S) *Security*, 3-20
 VT200-series terminals
 clearing screen, (G) *User*, 2-25; (S) *Security*, 3-20
 VTA0 device
 connecting, (S) *Sys Mgr Essentials*, 7-11
 VTX, (G) *SW Overview*, 5-13
 VUIT
 prototyping tool, (S) *Dependable*, 8-32
 VUP
 overview, (S) *Dependable*, 4-8
 VVIEF
 See VAX Vector Instruction Emulation Facility
 VVIEF\$DEINSTALL.COM command procedure, (S) *Sys Mgr Tuning*, 26-10
 VVIEF\$INSTALL.COM command procedure, (S) *Sys Mgr Tuning*, 26-5, 26-10

W

WAIT command, (G) *DCL N-Z*, DCLII-426 to DCLII-427
 synchronizing command procedures, (G) *User*, 18-19, 18-20, 18-21
 Waiting for condition variable, (P) *DECthreads*, pthread-33, pthread-35, cma-35, cma-37
 Waiting job status, (S) *Sys Mgr Essentials*, 13-69
 \$WAIT macro format, (P) *RMS Ref*, A-11
 Wait mode system service, (P) *Interfaces*, 4-6
 Wait service, (P) *RMS Ref*, RMS-107; (P) *File Appl*, 8-5
 asynchronous operations and, (P) *File Appl*, 8-19
 ASYNCHRONOUS option, (P) *Rec Mgmt Util*, 4-6
 condition values, (P) *RMS Ref*, RMS-108
 control block input fields, (P) *RMS Ref*, RMS-107
 control block output field, (P) *RMS Ref*, RMS-107

Wait state
 delaying command processing, (G) *DCL N-Z*, DCLII-426
 inducing to synchronize process with batch job, (G) *DCL N-Z*, DCLII-416
 involuntary, (S) *VAX Perform*, 3-12
 placing current process in, (G) *DCL N-Z*, DCLII-426
 scheduling
 types of, (S) *Alpha Perform*, 9-3
 voluntary, (S) *VAX Perform*, 3-11
 Wait states, (S) *DECams*, 3-5 to 3-25
 HIB, (S) *Alpha Perform*, 6-12
 involuntary, (S) *Alpha Perform*, 9-4
 LEF, (S) *Alpha Perform*, 6-12
 MWAIT, (S) *Alpha Perform*, 2-2, 9-4
 resource, (S) *Alpha Perform*, 9-4
 voluntary, (S) *Alpha Perform*, 9-3
 WAIT_FOR_RECORD attribute, (P) *Rec Mgmt Util*, 4-14; (P) *File Appl*, 7-12
 Wakeup requests
 canceling, (G) *DCL A-M*, DCLI-56; (P) *Sys Svc I*, SYS1-82
 canceling request, (G) *DCL N-Z*, DCLII-57
 scheduling, (P) *Concepts*, 5-16
 scheduling with RUN command, (G) *DCL N-Z*, DCLII-57
 Waking a thread, (P) *DECthreads*, pthread-31
 WAN communications service
 system management, (G) *V6.2 New Feat*, 8-12
 WAN intersite link specifications, (G) *V6.2 New Feat*, 8-10
 WANrouter, (G) *SW Overview*, 6-8
 WANs (wide area networks), (G) *SW Overview*, 1-11; (S) *TCP/IP*, 1-3; (S) *DECnet Intro*, 1-5
 Refer also to the *OpenVMS Wide Area Network I/O User's Reference Manual*
 comparison with VMSclusters, (S) *Dependable*, 6-20
 configuration, (S) *DECnet Intro*, 1-11
 connections, (S) *Sys Mgr Tuning*, 21-8
 multipoint, (S) *Sys Mgr Tuning*, 21-9
 point-to-point, (S) *Sys Mgr Tuning*, 21-8
 dependability constraints, (S) *Dependable*, 3-6
 utilizing in a VMScluster system, (G) *V6.2 New Feat*, 8-2
 WASTEBASKET folder
 emptying in Mail, (G) *User*, 6-15
 Watchpoints, (P) *Debugger*, 3-19
 activating, (P) *Debugger*, 2-5, 3-19, 7-13
 aggregate, (P) *Debugger*, 7-13, 15-3
 canceling, (P) *Debugger*, 7-13
 deactivating, (P) *Debugger*, 3-19, 7-13
 defined, (P) *Debugger*, 3-19, 7-11
 displaying, (P) *Debugger*, 3-19, 7-13
 effect on execution speed, (P) *Debugger*, 7-15
 global section, (P) *Debugger*, 14-16

Watchpoints (cont'd)

- in multiprocess program, (P) *Debugger*, 14-16
- in tasking (multithread) program, (P) *Debugger*, 16-25
- nonstatic variable, (P) *Debugger*, 3-19, 7-14
- register, (P) *Debugger*, 3-19, 7-14
- saving when rerunning program, (P) *Debugger*, 2-5, 5-9
- saving with RERUN command, (P) *Debugger*, 5-9
- setting, (P) *Debugger*, 3-19, 7-11
- shareable image, (P) *Debugger*, 7-16
- source display at, (P) *Debugger*, 10-7
- static variable, (P) *Debugger*, 3-19, 7-14
- vector register, (P) *Debugger*, 15-3
- WAT option, (P) *Rec Mgmt Util*, 4-14
- WBH option, (P) *Rec Mgmt Util*, 4-15
- WCBs (window control blocks), (P) *Alpha SDA*, SDA-76; (P) *VAX SDA*, SDA-81
- WCK option, (P) *Rec Mgmt Util*, 4-25
- Weak symbols, (P) *Linker*, 2-19
- Weekday login restrictions, (S) *Security*, 3-8
- Welcome messages, (S) *Security*, 3-6
 - defining, (S) *Sys Mgr Essentials*, 5-14
 - displaying, (S) *Sys Mgr Essentials*, 5-15
 - login, (S) *Sys Mgr Essentials*, 2-10
 - security disadvantages, (S) *Security*, 7-24
- WHEN clause, (P) *Debugger*, 7-9
- WHILE command, (P) *Debugger*, 12-10
- White box testing, (P) *Modular Proc*, 4-3
- Wide area networks
 - See WANs
- %WIDTH built-in symbol, (P) *Debugger*, 11-23
- /WIDTH qualifier, (P) *Debugger*, 11-22
- Wildcard address
 - security triplet, (S) *DECamds*, 1-6
- Wildcard characters, (S) *Sys Mgmt Util A-L*, 7-8; (P) *Rec Mgmt Util*, 2-5
 - asterisk (*), (G) *User*, 4-9
 - using with tape volumes, (S) *Sys Mgr Essentials*, 9-16
 - ellipsis (...), (G) *User*, 5-8, 5-9
 - for events, (S) *DECnet Mgmt*, 3-64
 - for NCP component names, (S) *DECnet Mgmt*, 3-4
 - hyphen (-), (G) *User*, 5-9
 - in DCL command lines, (G) *User*, 3-4
 - in DECnet event types, (S) *DECnet Intro*, 4-5
 - in file names, (S) *Sys Mgr Essentials*, 9-15
 - in file specifications for network copying operations, (S) *DECnet Intro*, 2-6
 - multiple file locations and, (P) *File Appl*, 5-8
 - percent sign (%), (G) *User*, 4-10
 - program preprocessing, (P) *File Appl*, 5-8 to 5-12
 - restriction in ACL editor, (S) *Sys Mgmt Util A-L*, 1-4

Wildcard characters (cont'd)

- use with Remove service, (P) *RMS Ref*, RMS-86
- use with Search service, (P) *RMS Ref*, A-21
- using to represent directories, (S) *Sys Mgmt Util A-L*, 7-8
- using with ANALYZE/RMS_FILE, (P) *Rec Mgmt Util*, 1-9
- using with CONVERT routines, (P) *Util Routines*, CONV-10
- using with file names, (G) *User*, 4-9
- using with NCP, (S) *DECnet Mgmt Util*, 1-3
- with OpenVMS extended names, (S) *Sys Mgr Essentials*, 9-16
- with standard names, (S) *Sys Mgr Essentials*, 9-16
- with tape volumes, (S) *Sys Mgr Essentials*, 9-15
- Wildcard operations, (P) *Sys Svc I*, SYS1-346
- Wildcard searches
 - obtaining information about processes, (P) *Sys Svc II*, SYS2-173
 - example, (P) *Concepts*, 3-13
 - using SYS\$GETJPI system service, (P) *Concepts*, 3-12
- Wildcard substitutions
 - specifying NAM\$L_RSA field, (P) *RMS Ref*, 5-8
- Window control blocks
 - See WCBs
- Windowing, (G) *SW Overview*, 1-3, 5-5
 - graphical interfaces, (G) *SW Overview*, 5-4
 - services for PCs, (G) *SW Overview*, 6-23
- Windowing system
 - using threads in, (P) *DECthreads*, 1-4
- Windows, (P) *File Appl*, 9-7 to 9-9
 - See also DECwindows Motif software, Data Windows, and Views
 - compressing or expanding, (S) *Sys Mgmt Util M-Z*, 4-54
 - designating, (S) *Sys Mgmt Util M-Z*, 4-50
 - displaying size and count for open files, (G) *DCL N-Z*, DCLII-265
 - display SHOW CLUSTER information, (S) *Sys Mgmt Util M-Z*, 4-3
 - for debugger command interface, (P) *Debugger*, 1-13
 - DECwindows Motif DECterm window, (P) *Debugger*, 2-9
 - VWS window, (P) *Debugger*, 13-5
 - for entering debugger commands, (P) *Debugger*, 1-13
 - instruction, (P) *Debugger*, 3-25
 - moving, (S) *Sys Mgmt Util M-Z*, 4-51
 - optional views window, (P) *Debugger*, 1-8
 - rearranging, (S) *Sys Mgmt Util M-Z*, 4-37
 - screen-mode
 - creating definition for, (P) *Debugger*, 11-14

Windows

screen-mode (cont'd)

- defined, (P) *Debugger*, 11-2
- deleting definition of, (P) *Debugger*, 11-15
- identifying, (P) *Debugger*, 11-15
- predefined, (P) *Debugger*, 11-24
- specifying, (P) *Debugger*, 11-14
- scrolling, (S) *Sys Mgmt Util M-Z*, 4-49
- sizes, (P) *File Appl*, 10-27
- source, (P) *Debugger*, 1-5
 - screen-mode, (P) *Debugger*, 11-4
- startup configuration, (P) *Debugger*, 1-5, 3-27
- terminating selection, (S) *Sys Mgmt Util M-Z*, 4-35
- viewing large display, (S) *Sys Mgmt Util M-Z*, 4-39

/WINDOWS qualifier

- in Mount utility, (S) *Sys Mgmt Util M-Z*, 2-39

WINDOW_SIZE attribute, (P) *Rec Mgmt Util*, 4-24

Word dumps, (G) *DCL A-M*, DCLI-186

word_signed data type, (P) *Interfaces*, B-16

word_unsigned data type, (P) *Interfaces*, B-16

Work area, (S) *Sys Mgmt Util M-Z*, 6-50, 6-51

Work crew model, (P) *DECthreads*, 1-5

Working directory

temporary

- in VMSINSTAL.COM command procedure, (S) *Sys Mgr Essentials*, 3-14

Working set lists

- displaying, (P) *VAX SDA*, SDA-151

Working sets, (S) *Alpha Perform*, 6-2 to 6-4; (S) *DECams*, 3-11 to 3-12, 3-22 to 3-23; (P) *File Appl*, 1-38

- adjusting, (S) *VAX Perform*, 5-3; (S) *Alpha Perform*, 17-2

- with AUTHORIZE, (S) *VAX Perform*, 2-24

- adjusting for optimal sort performance, (P) *Rec Mgmt Util*, 2-16

- adjusting for vectorized applications, (S) *Sys Mgr Tuning*, 26-7

- adjusting limit, (P) *Sys Svc I*, SYS1-20

- adjusting size, (P) *Concepts*, 19-11, 20-11

- analyzing problems, (S) *VAX Perform*, 4-7; (S) *Alpha Perform*, 13-4

- automatic adjustment, (S) *VAX Perform*, 2-6

- enabling, (S) *VAX Perform*, 5-7

- in relation to performance management, (S) *VAX Perform*, 2-15

- investigating status, (S) *VAX Perform*, 4-11

- of system parameters, (S) *VAX Perform*, 2-14

- page faulting, (S) *VAX Perform*, 2-7

- tuning to respond to increased demand, (S) *VAX Perform*, 5-6

batch jobs

Working sets

batch jobs (cont'd)

- defining default for, (G) *DCL A-M*, DCLI-270, DCLI-280; (G) *DCL N-Z*, DCLII-201, DCLII-375, DCLII-412

- defining extent for, (G) *DCL A-M*, DCLI-270, DCLI-280; (G) *DCL N-Z*, DCLII-201, DCLII-375, DCLII-413

count

- definition, (S) *Alpha Perform*, 6-1

- default size, (S) *Sys Mgr Essentials*, 6-43

- defining quotas for batch jobs, (G) *DCL A-M*, DCLI-280; (G) *DCL N-Z*, DCLII-63, DCLII-202, DCLII-375, DCLII-413

- determining quotas, (P) *Rec Mgmt Util*, 2-16

- determining when too large, (S) *VAX Perform*, 4-21; (S) *Alpha Perform*, 13-12

- discouraging loans when memory is scarce, (S) *VAX Perform*, 5-10; (S) *Alpha Perform*, 17-9

displaying

- process quota, (G) *DCL N-Z*, DCLII-355

- displaying information, (S) *Alpha Perform*, 10-3

- displaying lists, (P) *Alpha SDA*, SDA-129

- establishing sizes, (S) *VAX Perform*, 2-12

- extent, (S) *Sys Mgr Essentials*, 6-44

limits and quotas

- choosing a value for batch queues, (S) *Sys Mgr Essentials*, 13-30, 13-31

- specifying for batch queues, (S) *Sys Mgr Essentials*, 13-21, 13-29

- specifying for output queues, (S) *Sys Mgr Essentials*, 13-21

- locking page into, (P) *Sys Svc II*, SYS2-129

- modifying default size, (G) *DCL N-Z*, DCLII-239

- obtaining information, (S) *VAX Perform*, 3-21; (S) *Alpha Perform*, 10-2

- paging, (S) *Alpha Perform*, 5-4; (P) *Concepts*, 19-11, 20-10

- purging, (S) *DECams*, 4-5; (P) *Sys Svc II*, SYS2-186

- qualifiers, (G) *Compatibility*, A-2

- quota, (S) *Sys Mgr Essentials*, 6-44

- size, (S) *Alpha Perform*, 5-4

- size fix, (S) *DECams*, 4-3

specifying default

- for detached processes, (G) *DCL N-Z*, DCLII-63

- for subprocesses, (G) *DCL N-Z*, DCLII-63

- specifying quotas, (G) *DCL N-Z*, DCLII-60

- specifying values, (S) *VAX Perform*, 4-10; (S) *Alpha Perform*, 13-4

- suggested initial limits, (S) *VAX Perform*, 2-13

- too high or too low, (S) *DECams*, 4-3

- unlocking page from, (P) *Sys Svc II*, SYS2-405

/WORKING_SET qualifier, (P) *Alpha SDA*, SDA-129; (P) *VAX SDA*, SDA-151

WORKING_SET_MANAGEMENT.EXE file
global symbols, (P) *VAX SDA*, SDA-65

Work load

adjusting system parameters for, (S) *Sys Mgr Tuning*, 16-5

distributing, (S) *Sys Mgr Tuning*, 16-4; (S) *Alpha Perform*, 1-5

designing efficient applications, (S) *Sys Mgr Tuning*, 16-4

restricting login hours, (S) *Sys Mgr Tuning*, 16-4

importance of knowing, (S) *Sys Mgr Tuning*, 16-2; (S) *VAX Perform*, 1-2

knowing, (S) *Alpha Perform*, 1-3

managing, (S) *VAX Perform*, 1-3; (S) *Alpha Perform*, 1-4

monitoring, (S) *Sys Mgr Tuning*, 16-2

tools used for, (S) *Sys Mgr Tuning*, 16-2

strategies for managing, (S) *Sys Mgr Tuning*, 16-3

Work queues

variation of boss/worker model, (P) *DECthreads*, 1-5

Work restrictions, (S) *Security*, 7-2

WORKSET.COM command procedure

using to obtain working set information, (S) *VAX Perform*, 3-21; (S) *Alpha Perform*, 10-2

Worksheets

See also Checklists

evaluation of data centers, (S) *Dependable*, A-3 to A-20

sample requirements worksheet, (S) *Dependable*, 2-9

Workstations

backing up, (S) *Sys Mgr Essentials*, 10-36

debugging DECwindows Motif application, (P) *Debugger*, 2-8

debugging screen-oriented program

using separate DECterm window, (P) *Debugger*, 2-9

using separate VWS window, (P) *Debugger*, 13-5

managing queues on, (S) *Sys Mgr Essentials*, 13-2

OPCOM behavior on, (S) *Sys Mgr Essentials*, 2-21

OPCOM startup on, (S) *Sys Mgr Essentials*, 2-21

printer queue configuration, (S) *Sys Mgr Essentials*, 13-8

separate, for debugger DECwindows Motif interface, (P) *Debugger*, 2-8

separate debugger terminal-emulator window
using DECwindows Motif (DECterm), (P) *Debugger*, 2-9

Workstations

separate debugger terminal-emulator window
(cont'd)

using VWS, (P) *Debugger*, 13-5

setting up media on, (S) *Sys Mgr Essentials*, 8-11

starting SMISERVER process, (S) *Sys Mgr Essentials*, 2-12

terminal emulator screen size, (P) *Debugger*, 11-22

use of Snapshot facility with, (S) *Sys Mgr Essentials*, 4-21

WORLD privilege, (S) *Security*, A-19

impact on SHOW PROCESS command, (S) *Security*, 8-15

World protection code, (P) *Rec Mgmt Util*, 4-22

World users (security category), (S) *Security*, 4-8, 4-24; (S) *Sys Mgr Essentials*, 11-8

Write access, (P) *Rec Mgmt Util*, 4-23

See also Access types, write

continuation volumes, (S) *Sys Mgr Essentials*, 8-41

devices, (S) *Security*, 5-4

files, (S) *Security*, 5-8, 5-9

for disk directory files, (S) *Sys Mgr Essentials*, 9-11

for disk files, (S) *Sys Mgr Essentials*, 9-6

global sections, (S) *Security*, 5-14

granting through ACLs, (S) *Security*, 4-20

granting through protection codes, (S) *Security*, 4-25; (S) *Sys Mgr Essentials*, 11-8

logical name tables, (S) *Security*, 5-16

resource domains, (S) *Security*, 5-19

security class, (S) *Security*, 5-20

volumes, (S) *Security*, 5-21

Write attention AST function, (P) *I/O User*, 4-12

Write-back sections, (P) *Concepts*, 19-23, 20-25

Writeboot utility (WRITEBOOT), (S) *Sys Mgr Essentials*, 4-17

error messages, (S) *Sys Mgr Essentials*, 4-19

Write breakthrough function, (P) *I/O User*, 5-38

Write cache

enabling for tape device, (S) *Sys Mgr Essentials*, 8-24

Write check

with APPEND command, (G) *DCL A-M*, DCLI-38

with COPY command, (G) *DCL A-M*, DCLI-84

with INITIALIZE command, (G) *DCL A-M*, DCLI-250

WRITE command, (G) *DCL N-Z*, DCLII-428 to DCLII-430

for remote file, (S) *DECnet Intro*, 2-13

in network operations, (S) *DECnet Intro*, 2-13

in Show Cluster utility, (S) *Sys Mgmt Util M-Z*, 4-55

in SYSGEN, (S) *Sys Mgmt Util M-Z*, 5-33

writing data with, (G) *User*, 16-9

- WRITE command (cont'd)
 - writing strings to records, (G) *User*, 17-15
 - Write end-of-file function
 - magnetic tape, (P) *I/O User*, 3-17
 - message, (P) *I/O User*, 4-11
 - Write in Progress Fault Rate, (S) *Alpha Perform*, 10-4
 - Write-locked devices
 - mount verification, (S) *Sys Mgr Essentials*, 8-61
 - Write-locking
 - disk volumes, (S) *Sys Mgr Essentials*, 8-60
 - tape volumes, (S) *Sys Mgr Essentials*, 8-37
 - Write protection
 - hardware, (P) *I/O User*, 7-2
 - /WRITE qualifier
 - in Mount utility, (S) *Sys Mgmt Util M-Z*, 2-39
 - Write rings
 - on tape volumes, (S) *Sys Mgr Essentials*, 8-37
 - Write service, (P) *RMS Ref*, RMS-109 to RMS-111
 - \$WRITE service
 - use in calculating auto extend, (P) *File Appl*, 3-5
 - WRITE_BEHIND attribute, (P) *Rec Mgmt Util*, 4-14
 - WRITE_CHECK attribute, (P) *Rec Mgmt Util*, 4-24
 - Writing a condition handler
 - example, (P) *Concepts*, 13-65
 - Writing operations, (P) *SMG\$*, 2-8
 - WSDEFAULT process limit
 - specifying values, (S) *Sys Mgr Essentials*, 13-21 to 13-30
 - WSDEFAULT qualifier, (G) *Compatibility*, A-2
 - WSDEF process limit, (S) *Sys Mgr Essentials*, 6-43
 - WSEXTENT process limit, (S) *Sys Mgr Essentials*, 6-44
 - choosing a value for batch queues, (S) *Sys Mgr Essentials*, 13-30
 - for efficient sorting, (S) *Sys Mgr Essentials*, 13-31
 - specifying a value for batch queues, (S) *Sys Mgr Essentials*, 13-22, 13-29
 - specifying a value for output queues, (S) *Sys Mgr Essentials*, 13-22
 - value for efficient backups, (S) *Sys Mgr Essentials*, 10-10
 - WSEXTENT qualifier, (G) *Compatibility*, A-2
 - WSINC system parameter
 - page faulting, (S) *VAX Perform*, 2-7
 - /WSL qualifier, (P) *VAX SDA*, SDA-151
 - WSMAX system parameter, (S) *Sys Mgr Essentials*, 13-30; (S) *Sys Mgr Tuning*, 26-7; (S) *Alpha Perform*, 17-2
 - WSQUO process limit, (S) *Sys Mgr Essentials*, 6-44
 - WSQUOTA process limit
 - choosing a value for batch queues, (S) *Sys Mgr Essentials*, 13-30
 - specifying a value for batch queues, (S) *Sys Mgr Essentials*, 13-22, 13-29
 - specifying a value for output queues, (S) *Sys Mgr Essentials*, 13-22
 - value for efficient backups, (S) *Sys Mgr Essentials*, 10-10
 - WSQUOTA qualifier, (G) *Compatibility*, A-2
 - WSQUOTA system parameter
 - page faulting, (S) *VAX Perform*, 2-7
 - WWW (World Wide Web), (S) *TCP/IP*, 3-5
- ## X
-
- X.25 networks
 - accessing with specified multihost connector, (S) *DECnet Mgmt Util*, 3-92
 - clearing DTE counters, (S) *DECnet Mgmt Util*, 3-162
 - connecting to, (S) *DECnet Intro*, 1-6, 1-13; (S) *DECnet Mgmt*, 1-4
 - testing lines, (S) *DECnet Mgmt Util*, 3-52
 - X.25 packet level events, (S) *DECnet Mgmt Util*, D-11
 - X.25 protocol modules
 - counters, (S) *DECnet Mgmt Util*, 3-162, B-13
 - parameters, (S) *DECnet Mgmt Util*, 3-22, 3-94, 3-141
 - X.25 routers
 - clearing DTE counters, (S) *Comparison*, 6-8
 - connections not supported on Alpha systems, (S) *Comparison*, 6-5
 - server module, (S) *Comparison*, 6-8
 - X.25 server modules
 - See also P.S.I.
 - clearing call handler counters, (S) *DECnet Mgmt Util*, 3-163
 - counters, (S) *DECnet Mgmt Util*, 3-163, B-14
 - parameters, (S) *DECnet Mgmt Util*, 3-25, 3-100, 3-145
 - states, (S) *DECnet Mgmt Util*, C-8
 - state transitions, (S) *DECnet Mgmt Util*, C-8
 - X.25 software
 - CCITT recommendations, (G) *SW Overview*, 6-5, A-2
 - packet-switching networks, (G) *SW Overview*, 1-11, 6-5
 - X.25 support, (G) *Compatibility*, 2-3, 2-7
 - X/Open consortium, (G) *SW Overview*, 2-2, 6-10
 - X/Open Portability Guide Issue 3
 - See XPG3

X/Open Portability Guide Issue 4

See XPG4

X/Open standards, (G) *SW Overview*, 2-2, 6-10, A-1

XAB\$B_AID field, (P) *RMS Ref*, 7-2; (P) *File Appl*, 4-34

XAB\$B_ALN field, (P) *RMS Ref*, 7-2
options, (P) *File Appl*, 4-35

XAB\$B_AOP field, (P) *RMS Ref*, 7-3
options, (P) *File Appl*, 4-34

XAB\$B_ATR field, (P) *RMS Ref*, 9-2

XAB\$B_BKZ field, (P) *File Appl*, 3-25, 4-32, 7-18
as output, (P) *RMS Ref*, 7-4
default logic, (P) *RMS Ref*, 7-4, 7-5
determining bucket size, (P) *RMS Ref*, 7-4
in allocation XAB (XABALL), (P) *RMS Ref*, 7-4
in file header characteristics allocation XAB (XABFHC), (P) *RMS Ref*, 9-2

RMS-11 restriction, (P) *RMS Ref*, 7-4
size requirements for multiple index areas, (P) *RMS Ref*, 7-5

XAB\$B_BLN field

in allocation XAB (XABALL), (P) *RMS Ref*, 7-5
in date and time XAB (XABDAT), (P) *RMS Ref*, 8-2

in file header characteristics XAB (XABALL), (P) *RMS Ref*, 9-3

in item list XAB (XABITM), (P) *RMS Ref*, 10-2

in key XAB (XABKEY), (P) *RMS Ref*, 12-2
in protection XAB (XABPRO), (P) *RMS Ref*, 13-4

in revision date and time XAB (XABRDT), (P) *RMS Ref*, 14-2

in summary XAB (XABSUM), (P) *RMS Ref*, 16-1

in terminal XAB (XABTRM), (P) *RMS Ref*, 17-2

XAB\$B_COD field

in allocation XAB (XABALL), (P) *RMS Ref*, 7-5
in date and time XAB (XABDAT), (P) *RMS Ref*, 8-2

in file header characteristics XAB (XABFHC), (P) *RMS Ref*, 9-3

in item list XAB (XABITM), (P) *RMS Ref*, 10-2

in key XAB (XABKEY), (P) *RMS Ref*, 12-2
in protection XAB (XABPRO), (P) *RMS Ref*, 13-4

in revision date and time XAB (XABRDT), (P) *RMS Ref*, 14-2

in summary XAB (XABSUM), (P) *RMS Ref*, 16-1

in terminal XAB (XABTRM), (P) *RMS Ref*, 17-2

XAB\$B_DAN field, (P) *RMS Ref*, 12-3

XAB\$B_DBS field, (P) *RMS Ref*, 12-4

XAB\$B_DTP field, (P) *RMS Ref*, 12-4, 12-5

use with search key, (P) *RMS Ref*, 6-13, 6-15

XAB\$B_FLG field, (P) *RMS Ref*, 12-7

option allowable combinations, (P) *RMS Ref*, 12-9

options, (P) *RMS Ref*, 12-8

XAB\$B_HSZ field, (P) *RMS Ref*, 9-4

XAB\$B_IAN field, (P) *RMS Ref*, 12-9

XAB\$B_IBS field, (P) *RMS Ref*, 12-10

XAB\$B_LAN field, (P) *RMS Ref*, 12-11

indicating index level, (P) *RMS Ref*, 7-5

XAB\$B_LVL field, (P) *RMS Ref*, 12-11

XAB\$B_MODE field, (P) *RMS Ref*, 10-2

for stored semantics functions, (P) *RMS Ref*, 10-11

XAB\$B_MTACC field, (P) *RMS Ref*, 13-4

XAB\$B_NOA field, (P) *RMS Ref*, 16-2

XAB\$B_NOK field, (P) *RMS Ref*, 16-2

XAB\$B_NSG field, (P) *RMS Ref*, 12-12

XAB\$B_NUL field, (P) *RMS Ref*, 12-12

XAB\$B_PROLOG field, (P) *RMS Ref*, 12-13

XAB\$B_PROT_OPT field, (P) *RMS Ref*, 13-7

XAB\$B_RFO field, (P) *RMS Ref*, 9-5

XAB\$B_SIZ0 through XAB\$B_SIZ7 field, (P) *RMS Ref*, 12-14

XAB\$B_TKS field, (P) *RMS Ref*, 12-14

XAB\$C_ALLLEN value, (P) *RMS Ref*, 7-5

XAB\$C_ALL value, (P) *RMS Ref*, 7-5

XAB\$C_DATLEN value, (P) *RMS Ref*, 8-2

XAB\$C_DAT value, (P) *RMS Ref*, 8-2

XAB\$C_FHCLEN value, (P) *RMS Ref*, 9-3

XAB\$C_FHC value, (P) *RMS Ref*, 9-3

XAB\$C_ITMLLEN value, (P) *RMS Ref*, 10-2

XAB\$C_ITM value, (P) *RMS Ref*, 10-2

XAB\$C_KEYLEN value, (P) *RMS Ref*, 12-2

XAB\$C_KEY value, (P) *RMS Ref*, 12-2

XAB\$C_PROLEN value, (P) *RMS Ref*, 13-4

XAB\$C_PRO value, (P) *RMS Ref*, 13-4

XAB\$C_RDTLEN value, (P) *RMS Ref*, 14-2

XAB\$C_RDT value, (P) *RMS Ref*, 14-2

XAB\$C_SUMLEN value, (P) *RMS Ref*, 16-1

XAB\$C_SUM value, (P) *RMS Ref*, 16-1

XAB\$C_TRMLLEN value, (P) *RMS Ref*, 17-2

XAB\$C_TRM value, (P) *RMS Ref*, 17-2

XAB\$K_SEMANTICS_MAX_LEN value

for sensing and setting stored semantics, (P) *RMS Ref*, 10-10

XAB\$L_ACLBUF field, (P) *RMS Ref*, 13-2

XAB\$L_ACLCTX field, (P) *RMS Ref*, 13-2, 13-3

XAB\$L_ACLSTS field, (P) *RMS Ref*, 13-3

XAB\$L_ALQ field, (P) *RMS Ref*, 7-3; (P) *File Appl*, 4-34

using to specify additional file space, (P) *RMS Ref*, RMS-37

XAB\$L_COLNAM field, (P) *RMS Ref*, 12-2

XAB\$L_COLSIZ field, (P) *RMS Ref*, 12-3

XAB\$L_COLTBL field, (P) RMS Ref, 12-3
 XAB\$L_DVB field, (P) RMS Ref, 12-7
 XAB\$L_EBK field, (P) RMS Ref, 9-3
 XAB\$L_HBK field, (P) RMS Ref, 9-4
 XAB\$L_ITEMLIST field, (P) RMS Ref, 10-2
 XAB\$L_ITMLST field, (P) RMS Ref, 17-2
 XAB\$L_KNM field, (P) RMS Ref, 12-11
 XAB\$L_LOC field, (P) RMS Ref, 7-5; (P) File Appl, 4-35
 XAB\$L_NXT field
 in XABALL, (P) RMS Ref, 7-6
 in XABDAT, (P) RMS Ref, 8-2
 in XABFHC, (P) RMS Ref, 9-5
 in XABITM, (P) RMS Ref, 10-2
 in XABKEY, (P) RMS Ref, 12-12
 in XABPRO, (P) RMS Ref, 13-5
 in XABRDT, (P) RMS Ref, 14-3
 in XABSUM, (P) RMS Ref, 16-2
 in XABTRM, (P) RMS Ref, 17-2
 XAB\$L_RVB field, (P) RMS Ref, 12-14
 XAB\$L_SBN field, (P) RMS Ref, 9-5
 XAB\$L_UIC field, (P) RMS Ref, 13-4, 13-7
 XAB\$Q_BDT field, (P) RMS Ref, 8-2
 XAB\$Q_CDT field, (P) RMS Ref, 8-2
 XAB\$Q_EDT field, (P) RMS Ref, 8-2
 XAB\$Q_RDT field, (P) RMS Ref, 8-3, 14-3
 XAB\$V_BLK option, (P) RMS Ref, 9-2
 XAB\$V_CBT option, (P) RMS Ref, 7-4
 XAB\$V_CHG option, (P) RMS Ref, 12-8
 XAB\$V_CR option, (P) RMS Ref, 9-2
 XAB\$V_CTG option, (P) RMS Ref, 7-4
 XAB\$V_DAT_NCMR option, (P) RMS Ref, 12-8
 XAB\$V_DUP option, (P) RMS Ref, 12-8
 XAB\$V_FTN option, (P) RMS Ref, 9-2
 XAB\$V_HRD option, (P) RMS Ref, 7-4
 XAB\$V_IDX_NCMR option, (P) RMS Ref, 12-8
 XAB\$V_KEY_NCMR option, (P) RMS Ref, 12-8
 XAB\$V_NUL option, (P) RMS Ref, 12-8
 use in defining string keys, (P) RMS Ref, 12-12
 XAB\$V_ONC option, (P) RMS Ref, 7-4
 XAB\$V_PRN option, (P) RMS Ref, 9-2
 XAB\$V_PROPAGATE option, (P) RMS Ref, 13-7
 XAB\$W_ACLLEN field, (P) RMS Ref, 13-3
 XAB\$W_ACLSIZ field, (P) RMS Ref, 13-3
 XAB\$W_DEQ field, (P) RMS Ref, 7-5; (P) File Appl, 4-35
 XAB\$W_DFL field, (P) RMS Ref, 12-4
 use with RAB\$V_LOA option, (P) RMS Ref, 6-14
 XAB\$W_DXQ field, (P) RMS Ref, 9-3
 XAB\$W_FFB field, (P) RMS Ref, 9-3
 XAB\$W_GBC field, (P) RMS Ref, 9-4
 XAB\$W_GRP field, (P) RMS Ref, 13-4
 XAB\$W_IFL field, (P) RMS Ref, 12-10
 XAB\$W_ITMLST_LEN field, (P) RMS Ref, 17-2
 requirement for valid terminal driver, (P) RMS Ref, 17-1
 XAB\$W_LRL field, (P) RMS Ref, 9-4
 XAB\$W_MBM field, (P) RMS Ref, 13-4
 XAB\$W_MRL field, (P) RMS Ref, 12-11
 XAB\$W_MRZ field, (P) RMS Ref, 9-4
 XAB\$W_POS0 through XAB\$W_POS7 field, (P) RMS Ref, 12-12
 XAB\$W_PRO field, (P) RMS Ref, 13-5 to 13-6
 XAB\$W_PVN field, (P) RMS Ref, 16-2
 XAB\$W_RFI field, (P) RMS Ref, 7-6
 XAB\$W_RVN field, (P) RMS Ref, 8-3, 14-3
 XAB\$W_VERLIMIT field in XABFHC, (P) RMS Ref, 9-5
 XAB\$W_VOL field, (P) RMS Ref, 7-6; (P) File Appl, 4-36
 XAB\$ _ACCESS_SEMANTICS item, (P) RMS Ref, 10-10
 XAB\$ _ENABLE symbol, (P) RMS Ref, 10-12
 XAB\$ _MULTIBUFFER_COUNT XABITM, (P) RMS Ref, 10-11
 XAB\$ _NORECORD XABITM, (P) RMS Ref, 10-11
 XAB\$ _REF field, (P) RMS Ref, 12-13
 XAB\$ _STORED_SEMANTICS item, (P) RMS Ref, 10-10
 XABALL block, (P) RMS Ref, 1-4, 7-1
 XABDAT blocks, (P) RMS Ref, 8-1
 CDT field, (P) File Appl, 1-29
 description, (P) RMS Ref, 1-4
 EDT field, (P) File Appl, 1-29
 \$XABDAT_STORE macro
 example of use, (P) RMS Ref, A-8
 XABFHC block, (P) RMS Ref, 9-1
 description, (P) RMS Ref, 1-4
 XABITM block, (P) RMS Ref, 10-1 to 10-2
 description, (P) RMS Ref, 1-4
 XABJNL block, (P) RMS Ref, 11-1
 description, (P) RMS Ref, 1-4
 using to obtain journaling information, (P) RMS Ref, 4-20
 XABKEY block, (P) RMS Ref, 12-1
 data type options, (P) RMS Ref, 12-5
 default logic, (P) RMS Ref, 12-9
 description, (P) RMS Ref, 1-4
 XAB\$W_MRL field, (P) RMS Ref, 12-11
 XABPRO block, (P) RMS Ref, 13-1
 description, (P) RMS Ref, 1-4
 XAB\$B_BLN field, (P) RMS Ref, 13-4
 XAB\$W_GRP field, (P) RMS Ref, 13-4
 XABRDT block, (P) RMS Ref, 14-1 to 14-2
 description, (P) RMS Ref, 1-4
 XABRU block, (P) RMS Ref, 15-1
 description, (P) RMS Ref, 1-5
 XABs (extended attribute blocks), (P) Environment, 10-16; (P) File Appl, 1-34, 4-2; (P) Alpha SDA, SDA-76; (P) VAX SDA, SDA-81
 date and time fields, (P) File Appl, 4-32
 description, (P) RMS Ref, 1-6
 key definition fields, (P) File Appl, 4-33

- XABs (extended attribute blocks) (cont'd)
 naming conventions for FAB, (P) *RMS Ref*, 1-6
 naming conventions for RAB, (P) *RMS Ref*, 1-5
 program example, (P) *RMS Ref*, A-19
 protection fields, (P) *File Appl*, 4-32
 types, (P) *RMS Ref*, 1-4
- XABSUM block, (P) *RMS Ref*, 16-1
 description, (P) *RMS Ref*, 1-5
- XABTRM block, (P) *RMS Ref*, 17-1
 description, (P) *RMS Ref*, 1-5
- XAR keyword
 with MOUNT/PROTECTION command, (S)
 Sys Mgr Essentials, 8-23
- XARs (extended attribute records), (S) *Sys Mgr Essentials*, 8-17
- %X format, (P) *Rec Mgmt Util*, 1-18
- XOR operator (\), (P) *Alpha SDA*, SDA-13; (P)
 VAX SDA, SDA-16
- XPG3 (X/Open Portability Guide Issue 3), (G) *SW Overview*, A-1
 BASE specification, (G) *SW Overview*, 2-2, 2-4
 Common Applications Environment, (G) *SW Overview*, 4-16
- XPG4 (X/Open Portability Guide Issue 4), (G) *SW Overview*, A-1
 BASE profile specifications, (G) *SW Overview*,
 2-2, 2-4
- XPG4 localization utilities, (G) *V6.2 New Feat*,
 5-1
 character map (charmap) file, (G) *V6.2 New Feat*, 5-42 to 5-47
 GENCAT command, (G) *V6.2 New Feat*, 5-1
- ICONV commands
 COMPILE, (G) *V6.2 New Feat*, 5-6
 CONVERT, (G) *V6.2 New Feat*, 5-10
- LOCALE commands
 COMPILE, (G) *V6.2 New Feat*, 5-11
 LOAD, (G) *V6.2 New Feat*, 5-14
 SHOW CHARACTER_DEFINITIONS, (G)
 V6.2 New Feat, 5-15
 SHOW CURRENT, (G) *V6.2 New Feat*,
 5-16
 SHOW PUBLIC, (G) *V6.2 New Feat*, 5-18
 SHOW VALUE, (G) *V6.2 New Feat*, 5-18
 UNLOAD, (G) *V6.2 New Feat*, 5-15
 locale file format, (G) *V6.2 New Feat*, 5-22 to
 5-42
- XQP (extended QIO processor), (P) *VAX SDA*,
 SDA-105; (P) *I/O User*, 1-1
- X terminal client, (S) *Sys Mgr Tuning*, 23-4
- X Window System, (G) *SW Overview*, 5-4, 6-23,
 A-1
-
- ## Y
-
- y0 routine, (P) *Portable Math*, DPML-11, B-14
 y1 routine, (P) *Portable Math*, DPML-11, B-14
 Yielding to another thread, (P) *DECthreads*,
 pthread-77
 yn routine, (P) *Portable Math*, DPML-11, B-14
-
- ## Z
-
- ZERO CIRCUITS command, (S) *DECnet Mgmt*,
 3-36; (S) *DECnet Mgmt Util*, 3-159
- ZERO COUNTERS command, (S) *DECnet Intro*,
 4-3
 in LATCP, (S) *Sys Mgmt Util A-L*, 13-60
- Zero creation date, (P) *File Appl*, 1-29
- ZERO EXECUTOR command, (S) *DECnet Mgmt*,
 3-22; (S) *DECnet Mgmt Util*, 3-160
- Zeroing
 line counters, (S) *DECnet Mgmt*, 3-49
 node counters, (S) *DECnet Mgmt*, 3-22
- ZERO LINE command, (S) *DECnet Mgmt*, 3-49;
 (S) *DECnet Mgmt Util*, 3-161
- ZERO MODULE X25-PROTOCOL command, (S)
 Comparison, 6-8; (S) *DECnet Mgmt Util*,
 3-162
- ZERO MODULE X25-SERVER command, (S)
 Comparison, 6-8; (S) *DECnet Mgmt Util*,
 3-163
- ZERO MODULE X29-SERVER command, (S)
 Comparison, 6-8; (S) *DECnet Mgmt Util*,
 3-163
- ZERO NODE command, (S) *DECnet Mgmt*, 3-22;
 (S) *DECnet Mgmt Util*, 3-164
- Zero-numbered objects, (S) *DECnet Mgmt*, 2-25
- Zero UICs, protection checking and, (S) *Security*,
 4-11
- ZLX-E1, (P) *Environment*, 2-6
 ZLX-M1, (P) *Environment*, 2-6
 ZLX-M2, (P) *Environment*, 2-6
- Zones, (P) *Concepts*, 21-6 to 21-14
 See also Memory, virtual, and Virtual memory
 allocation algorithm, (P) *Concepts*, 21-14
 use on VAXft systems, (S) *Dependable*, 6-8









